# CONSTRUCTION NEWS

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## RAILWAYS.

(✱*Denotes that this work is advertised in Engineering News.*)

NEW JERSEY.—A bill has been introduced in the State Legislature, at the request of the Pennsylvania R. R., to enable any railway company to acquire land by condemnation, when necessary, not exceeding 50 ft., in addition to the 100 ft. right-of-way previously allowed, to permit six tracks being placed where the traffic demands. This is taken to mean that the Pennsylvania intends to complete its six-track line across New Jersey.

✱PENNSYLVANIA.—Baltimore & Ohio R. R. Official advices state: "The contract for the construction of a new double-track tunnel, with its approaches, between Sand Patch and Manila, Pa., has been awarded to H. S. KERBAUGH, INC., 922 Arcade Bldg., Philadelphia, Pa." The tunnel will be 4,000 ft. long, and the contract is approximately $1,250,000. Noted on March 16.

NORTH CAROLINA.—The Raleigh, Charlotte & Southern Ry. has recently been incorporated to build a railway between Raleigh and Charlotte, by way of Pittsboro, Asheboro and Albemarle. The incorporators are: W. L. Mann and R. L. Brown, Charlotte; A. H. London, Pittsboro; and O. R. Cox, Asheboro.

LOUISIANA.—The Illinois Central Ry. contemplates improvements involving expenditures aggregating $3,500,000. Nearly $1,000,000 is to be expended in double tracking 48 miles of main line between New Orleans and Ponchatoula, and in rectifying the grades between McComb City, Miss., and New Orleans, a distance of 105 miles. A. S. Baldwin, Chicago, Ill., is Ch. Engr.

✱TENNESSEE.—Birmingham & Northwestern Ry.—Official advices state: "The contract was awarded, April 12, to J. W. WRIGHT, JR., Union Springs, Ala., for constructing 50 miles of road from Jackson to Dyersburg, Tenn. It calls for completion of the road within six months. The construction will start at the Jackson end. There are approximately 500,000 cu. yds. earth work, no rock; 100 acres clearing; 3,300 lin. ft. trestle; 2,500 lin. ft. pipe; one 70-ft. steel span across Forked Deer River. The line passes through Madison, Crockett and Dyer counties, and through Bells, Alamo, Crockett Mills, and Friendship. The country is a farming section, except where timbered. The road will connect with the Nashville, Chattanooga & St. Louis Ry., Illinois Central Ry., and the Mobile & Ohio Ry. at Jackson, The Louisville & Nashville Ry., at Bells, and the Illinois Central Ry. and the Memphis, Chicago & Gulf Ry., at Dyersburg, Tenn." R. M. Hall is Pres., and M. Harvey, Ch. Engr., both of Jackson, Tenn.

✱Jackson Construction Co., Jackson, Tenn.—Bids are wanted on the following materials for construction of the above railroad: 60-lb. rail with spikes, angle bars, etc.; 70-lb. rail with 18" spikes, angle bars, etc.; 1,000 lin. ft. 24-in. pipe, all classes; 270,000 ft. B. M. bridge timber; 1 70' steel span; 2 railroad crossings; cattle guards; switches, switch-stands, etc. Quote prices f. o. b. cars at Jackson, Tenn.; Bells, Tenn., and Dyersburg, Tenn. P. M. Hall, Jackson, Tenn., is Pres.

✱KENTUCKY.—Louisville & Nashville R. R.—The contract for a new classification yard, with a sorting capacity for 4,000 cars and storage capacity for 1,500 cars at Decoursey, near Latonia, has been awarded to THRASHER & GUNTER, Knoxville, Tenn.

OHIO.—Pennsylvania System (Cleveland & Pittsburg R. R.).—The subsidiary company has increased its capital from $22,000,000 to $40,000,000 to complete the following improvements: The sum of $4,500,000 for the completion of work heretofore authorized and already undertaken at different points along the line; $3,000,000 for track elevation in connection with grade-crossing elimination at Cleveland; $2,000,000 for new docks and dock machinery at the same point; $2,500,000 for the road's one-fourth share of the estimated cost of the proposed new union passenger station there; $2,000,000 for the completion of the second track between this city and Cleveland, now under construction; $2,000,000 for the construction of third and fourth tracks, and $2,000,000 for additional equipment. Thomas Rodd, Pittsburg, Pa., is Ch. Engr. of Lines West of Pittsburg.

NORTH DAKOTA.—Great Northern Ry.—Press dispatches are to the effect that James J. Hill has stated the cut-off, or air line, from Fargo to Surry will be built this year. This line, about 200 miles long, will in part be through a new territory and avoid a long detour by way of Grand Forks. It has been projected several years. A. H. Hogeland, St. Paul, Minn., is Ch. Engr.

TEXAS.—The following report concerning railroad activity is issued by the State Railroad Commission:

"Atchison, Topeka & Santa Fe Ry. Besides the work that it is doing on the 310-mile cut-off between Coleman and Texico, it is gridironing the western part of the State with the following branch lines: From Lometa to Eden, about 100 miles, following the valleys of the San Saba River and Brady Creek; from San Angelo to Sterling City, 75 miles, following the valley of the Concho River; from Plainview to Post City, about 100 miles, through a productive part of the Western Panhandle; from a point on the Plainview-Post City line to La Mesa, 75 miles; from Plainview to Floydada, about 40 miles. More than one-half of the Coleman-Texico cut-off line is now finished and in operation. Atchison interests are also back of the Port Bolivar Iron Ore R. R., from Longview to the iron ore fields in Cass County, in northeastern Texas. This latter line will be 30 miles long.

"The Kansas City, Mexico & Orient is pushing construction on both its main line and Del Rio branch line in Texas. Grading and track-laying forces are at work between San Angelo and Port Stockton and between El Dorado and Del Rio. More than 200 miles of new track will be finished during the present year for the system, according to present expectations.

"The Texas Central, now owned by the Missouri, Kansas & Texas, recently amended its charter to provide for extending its new branch line, that was finished to Cross Plains a short time ago, from the latter place to Nolan, 100 miles. The main line of the Texas Central will be extended from Roton to Roswell, N. M., about 300 miles. The Missouri, Kansas & Texas will also obtain a Southeastern outlet by connecting up its "Orphan" line that now runs between Trinity and Colmesneil, 75 miles, in Eastern Texas, with its main line and the Houston & Texas Central at Waco, and by building an extension of about 75 miles from Colmesneil to Beaumont. From Trinity to Waco is about 150 miles. All of these construction plans have been definitely decided upon and the work will be started during the present year.

"The Southern Pacific Co. has surveyed a cut-off line about 50 miles long between Gliddings and Stone City in the Central part of the State. It is again reported that it will extend the Llano branch of the Houston & Texas Central from Llano west to Menardville, about 10 miles.

"The St. Louis & San Francisco R. R. recently finished the construction of a branch line from Brady to Menardville, more than 50 miles, and this road will eventually be continued south to a connection with the Southern Pacific, the Kansas City, Mexico & Orient and the National Railways of Mexico at Del Rio, about 175 miles. It will give the St. Louis & San Francisco a new outlet to Mexico and establish a new north and south line in Texas. It is reported that the work of constructing the long contemplated extension of the Fort Worth & Rio Grande division of the St. Louis & San Francisco from Brady to San Antonio, about 175 miles, will be started during the present year. The St. Louis, Brownsville & Mexico, which belongs to the same interests, will be extended up the valley of the Rio Grande from Sam Fordyce to Roma, 42 miles.

"An independent construction company is being organized for the building of a railroad between San Antonio and Brownsville, about 275 miles. Stock to the amount of $500,000 has been subscribed to the proposed company by people of San Antonio. (San Antonio & Mexico Construction Co. Noted April 13).

"The St. Louis Southwestern is constructing an extension of its branch line that runs from Waco to Gatesville from the latter place to Commanche, about 75 miles. This line is already finished to Hamilton, about one-half the distance.

"Many prospective railroad projects, involving the construction of several thousand miles of new track in Texas are still on paper."

UTAH.—Eastern Utah R. R.—We are officially advised that surveys have been completed, the right-of-way obtained for this 60-mile steam road between Wellington and Emery. The line will pass through Cleveland, Huntington, Castle Dale and Ferron. The construction will be easy work—all dirt. The capital has been partially secured. Henry Wade, Price, Utah, is Pres., and Ira R. Browning, Castle Dale, Utah, Ch. Engr. Noted on March 16.

Union Pacific R. R.—See California.

✱CALIFORNIA.—Topeka & Santa Fe Ry.—The contract to widen the roadbed and reduce grades between Fresno and Mercer has been awarded to GEORGE WEST, 424 Third St., San Bernardino.

Work is to be started soon on a divisional terminal for the Santa Fe in Fresno. About $750,000 will be spent by the railroad in this project. The new freight yards will be about 1½ miles long and a half mile wide, and 30 miles of switching track will be laid. A roundhouse, capable of holding not less than 50 engines, will be constructed, and extensive machine shops.

The Redwood City Water Front Ry. Co. has been incorporated. The directors are: George A. Merrill, George W. Loire, V. V. Greco, W. J. Drew and C. F. Morrison. The company proposes to build a railway from a point one-half mile south of Redwood City to a point on San Francisco Bay, a distance of five miles.

Union Pacific R. R.—Announcement has been made by Julius Kruttschnitt, Vice-Pres. of the Union Pacific and Southern Pacific roads, as follows: "The double-track work will begin at a number of places at the same time. One stretch will be from Bernicia, Cal., near San Francisco, to Sacramento, about 60 miles. About the heaviest traffic on the Southern Pacific goes over this piece of track. Filling this gap will give a double track from San Francisco to Colfax. The facilities of the ferry at Bernicia also will be doubled to accommodate the increased traffic. Another stretch will be at the end of the Salt Lake cut-off. In connection with it, there will be some changes of the line and reduction of grades, which will improve the train loading on the Central Pacific. We shall build a low-grade line up the mountain and use the present high grade line for the down traffic, as is often done in such cases. The Union Pacific will be double-tracked from Julesburg, Colo., west about 100 miles, and from Ogden to Farmington, Utah. It is already double-tracked from Farmington to Salt Lake."

MANITOBA.—The Canadian Northern Ry. is calling for bids until May 12 for the construction of the section through the Fraser and Thompson canyons from Hope to Kamloops. This section is 162 miles long of difficult work; it is expected to cost in the vicinity of $15,000,000.

## ELECTRIC RAILWAYS.

(✱*Denotes a contract awarded.*)

WATERBURY, CONN.—The Connecticut Co. will double-track its Bank St. line for almost its entire length, including a new double-track crossing with connecting curves, in Exchange Pl. C. C. Elwell, New Haven, is Ch. Engr.

CATSKILL, N. Y.—The Directors of the Catskill Traction Co. will begin at once to secure right-of-way for a line from Leeds to Cairo and one from Catskill to Alsen and Cementon. It is not decided which line will be built first. W. C. Wood, Railroad Ave. and Main St., Catskill, is Pres. and Gen. Mgr.

MOUNT VERNON, N. Y.—The Westchester Electric Ry. Co. will reconstruct its Chester Hill line. J. Addison Young, New Rochelle, N. Y., is Receiver.

NEW YORK, N. Y.—A franchise has been granted to the Union Ry. Co. to build a trolley extension in St. Ann's Ave., from 161st St. to the Southern Boulevard. Frederick H. Whitridge is Receiver.

CHESTER, PA.—The Philadelphia Rapid Transit Co. has in contemplation the construction of a branch line extending from its present Short Line, at its new bridge spanning Ridley River, to Fourth St. and Highland Ave., thereby giving the residents of that part of the town the convenience of a direct trolley route through to 15th and Market Sts., Philadelphia. It is understood that the company will build a bridge over Chester River. H. H. Nichols, 820 Dauphin St., Philadelphia, Pa., is Ch. Engr.

HELLERTOWN, PA.—The Hellertown & Richlandtown St. Ry. Co. has been organized, and application for a charter has been made. Right-of-way has been secured from the Hellertown borough limits to the Richlandtown borough limits. A. R. Trumbauer is interested.

LEBANON, PA.—A railway is contemplated, and it is stated work will begin within a month by the Ephrata & Lebanon St. Ry. Co., which will connect Lebanon, Schaefferstown, Hopeland, Clay, Lincoln and Ephrata, about 25 miles. A power house and shops will be located at Ephrata, but storage battery cars will be used. H. H. Singer, Ephrata, is Pres., and M. H. Shirk, Lincoln, is Secy. and Treas.

POTTSVILLE, PA.—Surveys are being made by the Eastern Pennsylvanmia Rys. Co. for an extension of 18 miles, connecting Shenandoah, Frackville and Pottsville. J. G. White & Co., 43 Exchange Pl., New York, N. Y., are Operating Mgrs.

CLARKSBURG, W. VA.—The Tyler Traction Co. has been chartered to build a line from Sisterseville through Middlebourn to Shirley. Authorized capital is $500,000. The incorporators are J. T. Ingram, Pursley, W. Va.; W. J. Neuenschwander, E. A. Durham, A. J. Jackson, Joseph McKay, Henry W. McCoy, and John Kincaid, all of Sisterseville, W. Va.

ATLANTA, GA.—A railway from Macon to Atlanta, about 80 miles, is contemplated by the Atlanta, Griffin & Macon Electric Ry. Co. It is stated contracts will be awarded in the near future. W. J. Massee, Grand Bldg., Macon, Ga., is Pres.

NASHVILLE, TENN.—The Nashville Street Ry. & Light Co. contemplates building several extensions to present system, also adding new lines. An application for an amendment to its charter has been applied for as follows: A line across the Broadway bridge, beginning at Fourth Ave. and extending entirely across the bridge to Shelby Ave., in East Nashville. On McFerrin Ave., from Main St. to Driver's Lane. On Fatherland St., from Eleventh St. to Shelby Ave. On the Granny White Road, from Fairview Ave. to a point opposite Glendale Park. On Baxter Ave., from Madison Ave. to Portland Ave., and on Portland Ave. to Belmont Boulevard. Percy Warner, Nashville, Tenn., is Pres. and Gen. Mgr.

BRISTOL, TENN.—Contracts will probably be let soon for two extensions and a loop in the western section of the city. A line to Virginia Park is also contemplated. F. Dulaney, of this city, is Gen. Mgr.

SCOTTSBURG, IND.—Bids will be received until May 30 by the Cincinnati, Madison & Western Traction Co. for the construction of a railway, about 41 miles. J. E. Greeley, Louisville, Ky., is Pres. Noted on March 30.

CHESTERTON, IND.—The Chesterton Town Board has granted a franchise to the Calumet United Ry. for an interurban railway connecting Chesterton with East Chicago.

CALEDONIA, MICH.—The Grand Rapids, Hastings & Battle Creek Interurban Ry. Co., Grand Rapids, will build a railway in Lake St. It is stated a franchise has been received. A. C. Schell, Grand Rapids, is a representative.

OMAHA, NEB.—The contract has been awarded by the Nebraska Transportation Co., of Omaha, for an interurban railroad to run from Omaha through Arlington, Bertha and Walthill to Sioux City, with branches from Elk City to Madison and Norfolk, and from Bertha east to Decatur and west to West Point, about 284 miles. A power house near Elk City, on the Platte River, capable of generating 2,000 HP. Two and a half years will be required to complete the road, and the cost will be approximately $8,000,000. Noted on Jan. 26.

KANSAS CITY, MO.—The Metropolitan St. Ry. Co. will, press reports advise us, extend its 18th St. line from Minnesota Ave. to Central Ave.; also the Tenth St. line, from Thirteenth St. to Quindaro Boulevard. E. Butts, 1300 Grand Ave., Kansas City, Mo., is Engr.

FORT WORTH, TEX.—The Cleburne Bd. of Trade has signed a contract granting Stone & Webster a right-of-way, 100 ft. wide, for seven miles out of Cleburne, and necessary franchises in the city to build the proposed railway from Fort Worth to Cleburne. G. H. Clifford, Gen. Mgr., of the Northern Texas Traction Co., is representing Stone & Webster. 147 Milk St., Boston, Mass. Noted on March 30.

SAN ANGELO, TEX.—J. D. Sugg, of San Angelo, who recently purchased the electric street railway system here, will make extensive improvements, including the construction of new lines.

HOQUIAM, WASH.—The City Council has passed an ordinance granting the Grays Harbor Ry. & Light Co. the right to construct and operate street railways across certain streets here.

ALBANY, ORE.—The Oregon Electric Ry. Co., it is reported, is making a survey north and southwest of Albany for a new road. C. A. Coolidge, Portland, is Gen. Mgr.

CANBY, ORE.—A railway is projected by a new company to connect Canby, Mackeburg, Needy, Mulalla, Meadowbrook and Colton. The Canby Canal Co. is reported to be connected with the project.

BURLINGAME, CAL.—Ansel M. Easton has made application to the Bd. of Trustees for a franchise to build, maintain and operate a railway in the town of Easton, which recently became a part of Burlingame, for 50 years. F. J. Rodgers is the Atty.

JACKSON, CAL.—A movement is on foot in Amador County to connect Jackson and the adjacent towns with Sacramento by electric railways. At the May meeting of the Bd. of Supervisors a petition for such a franchise will be applied for.

OAKLAND, CAL.—The Oakland & Bay Shore Ry. Co., allied with the Oakland & Antioch Ry. Co., has filed an application with the Council asking for a franchise for 50 years on Shatter Ave., at 40th St., and along Shatter Ave. to 880 ft. beyond 81st Ave. This line will form the connecting link between these lines.

SAN FRANCISCO, CAL.—At a conference of city officials, April 9, it was decided that roadbed and track work should be done by contract, but that the poles will be placed under the direction of the Board of Works. Works Commissioner C. S. Laumeister has proposed a plan for ornamental poles and parked roadway along the Geary St. road on Point Lobos Ave. The poles are to be set in the middle of the street, between the tracks, with brackets carrying the trolley wires. This is a municipal enterprise.

MEAFORD, ONT.—The People's Ry. Co., Berlin, contemplate building a railway here. Application for a franchise will be made soon. A. S. Kibbe, Philadelphia, is Ch. Engr.

TORONTO, ONT.—A franchise has been granted to the Toronto Ry. Co. to build a loop in Lentes St., and for an extension in Lansdowne Ave. W. B. Boyd, Toronto, is Ch. Engr.

## LIGHT AND POWER PLANTS.

(✱*Denotes that this work is advertised in Engineering News.*)

PORTSMOUTH, N. H.—The bids opened on April 1 for hot-water heating system and power plant extensions at the U. S. Navy Yard at Portsmouth were as follows: Noel Constructing Co., Baltimore, Md., $45,140; Evans, Almirall & Co., 281 Water St., New York, N. Y., $41,400; Thomas E. Gildea, 119 West Willow St., Syracuse, N. Y., $40,574; D'Olier Engineering Co., 1421 Chestnut St., Philadelphia, Pa., $38,470; Walworth Mfg. Co., 132 Federal St., Boston, Mass., $36,599; Newport Constructing & Engineering Co., Inc., Stisby Bldg., Newport News, Va., $37,508; J. W. Danfort &Co., 72 Ellicott St., Buffalo, N. Y., $35,874.

AMHERST, MASS.—The Amherst Gas Co. has voted to extend its lighting lines in Hatfield, to add 75 incandescent street lights in

that town, and to extend its gas mains through Hallock St. and through Lincoln Ave., from Amity St. to Northampton Road.

✚WESTFIELD, MASS.—The contract for furnishing the cables for the underground conduit system of the electric light and power system in connection with the Elm St. and Park Square improvements has been awarded to the SAFETY INSULATING WIRE & CABLE CO., of New York, at $11,655, it is stated.

✚AUBURN, N. Y.—The contract for the construction of an electrical subway in East Genesee St. was awarded to BEAVER BROS., Auburn, by the Common Council. Fiber material will be used. The cost will be about $30,000.

✚AUBURN, N. Y.—An extension of five years from Oct. 1, 1911, for lighting the city streets has been granted to the AUBURN LIGHT, HEAT & POWER CO.; also a contract for ten years for ornamental lights in the business section.

KATONAH, N. Y.—The Public Service Comn. has authorized the Katonah Lighting Co. to spend $45,000 for extensions and improvements to plant. The electric lighting service will be extended to the town of Lewisboro, Westchester County.

NEWARK, N. Y.—The bids received on April 5 by Henry H. Stebbins, Pres. of the Board of Managers, New York State Custodial Asylum, at Newark, N. Y., for addition to boiler house at that institution and for two new 150-HP. boilers, were as follows: R. T. Ford Co., Rochester, N. Y., $15,666; Casey & Murray, Rochester, N. Y., $16,135; Schumann & Burcroff, $15,857; Edward Joy, Syracuse, N. Y., $18,198; A. D. Granger Co., New York, N. Y., $17,416; W. B. Armstrong, Albany, N. Y., $18,358. F. B. Ware is State Arch.

SODUS, N. Y.—The Northern Wayne Electric Light & Power Co. has filed articles of incorporation at Lyons and has made application to the Public Service Comn. for permission to issue stock of $75,000 for the purpose of additions to the plant to supply power in Sodus, Rose, North Rose, Wolcott, North Wolcott, Butler, Resort, Red Creek, Fair Haven and Sterling.

WATERFORD, N. Y.—The Ford Manufacturing Co. is arranging to install electrical equipments to take the place of steam power.

*WEST POINT, N. Y.—Bids will be received by the Quartermaster until 2 P. M., May 15, for supplying the U. S. Military Academy with fuel, gas, coal and charcoal required during the fiscal year ending June 30, 1912, and for building materials, plumbing materials, gas and steam fittings, hardware, paints, glass, electrical goods, stationery, and other miscellaneous stores specified in schedules to be had upon application to this office.

SYRACUSE, N. Y.—The Syracuse Lighting Co. has asked the Public Service Comn. for permission to issue $470,000 of bonds to enable it to improve its plant and lay about 33,000 ft. of gas pipe. Extensions are planned in Lodi St., from Court to Center Sts., Wolf, from Lodi to North Salina, East Willow, from Townsend to Highland, East Water, from Salina to Almond; Tallman, from Cortland to South Ave.; West Water, from Franklin to South Salina; Montgomery, from East Water to Harrison. Electricity is also to be furnished to the plant of the Solvay Process Co., near Jamesville.

NEW YORK, N. Y.—The Kops Bros., Irving Pl. and 16th St., will install an electric generating plant, including two generator sets of 150 KW. O. E. Goldsmith, 30 West 38th St., New York, is the Consult. Engr.

✚HOBOKEN, N. J.—The contract for the electric and gas fixtures to be installed in the High School at Fourth and Bloomfield Sts. has been awarded to JAEHNIG GAS FIXTURE CO., 221 13th Ave., Newark, N. J., at $5,860. Noted March 30.

PLYMOUTH, PA.—Bids will be received by John Lore, Secy. Town Comrs., Plymouth Township, until April 24, for arc lighting in certain streets for a period of five, seven and ten years.

HARRISBURG, PA.—It is stated that the Central Pennsylvania Traction Co. will purchase new generators and engines with a capacity of 1,000 to 1,500 KW., to be installed at the power house here. J. O'Connell, 12 South Second St., Harrisburg, is Pur. Agt.

✚BALTIMORE, MD.—The contract for the vitrified tile conduit was awarded to THE GREAT EASTERN CLAY CO., New York, N. Y., and for the special duct pipe to the FIBRE CONDUIT CO., Orangeburg, N. Y., they being the lowest bidders respectively on the separate items.

WASHINGTON, D. C.—Bids will be received by C. H. Rudolph Chn. of Bd. of Comrs., Washington, D. C., until April 25, for furnishing two steam engines and two generators to be installed in the McKinley Manual Training School.

ATLANTA, GA.—The Austell Power Co. has recently organized, with a capital of $300,000, to develop water power and to establish a lighting system. The main offices of the company will be located in Atlanta. Napier, Wright & Cox are the Attys. The organizers are C. C. Bruckner, Atlanta.; George W. Mason, Atlanta; and George E. Zimmerman, New York, N. Y.

✚*JACKSONVILLE, FLA.—Bids were opened, April 4, by the Bd. Trus. Waterworks and Improvement Bonds, for furnishing, delivering and installing machinery at the new power station, and the following are the bids received: Boiler Feed Pumps: WARREN STEAM PUMP CO., Warren, Mass., $4,228 (awarded contract); Epping Carpenter Co., Philadelphia, Pa., $3,300; C. H. Wheeler Mfg. Co., Philadelphia, Pa., $5,550; T. T. Birchfield Co., Philadelphia, Pa., $4,890; H. R. Worthington, New York, N. Y, $6,183 Condenser, Pump and Engine: C. H. WHEELER MFG. CO., Philadelphia, Pa., $32,950 (awarded contract); H. R. Worthington, New York, N. Y., $31,191; Alberger Condenser Co., New York, N. Y., $40,755. Feed Water Heater:: WARREN WEBSTER & CO., Camden, N. J., $1,850 (awarded contract); Harrison Safety Boiler Works, Philadelphia, Pa., $2,315. Crane; NILES-BEMENT-POND CO., Philadelphia, Pa., $4,960 (awarded contract); Paulding & Harwick, Milwaukee, Wis., $5,375; Manning, Maxwell & Moore, New York, N. Y., $6,365; Case Crane Co., Columbus, Ohio, $4,671; Toledo Bridge & Crane Co., Toledo, Ohio, 5,175. Two Exciters, two 1,500-KW. Turbines: GENERAL ELECTRIC CO., Schenestady, N. Y., $54,642 (awarded contract); Allis-Chalmers Co., Milwaukee, Wis., $57,930; Westinghouse Co., Pittsburg, Pa., $60,329. New and Old Boilers: BABCOCK & WILCOX CO., New York, N. Y., $39,384 (awarded contract); E. Keeler Co., Williamsport, Pa., new boilers only, $20,186; Casey-Hedges Co., Chattanooga, Tenn., new boilers only, $19,200. B. S. Ellis is Supt. water-works and electric light plant.

LORAIN, OHIO.—Bids will be received at the office of E. Bruell, Clk. of the Bd. of Education, Odd Fellows Block, Ninth St., until 12 noon, May 1, for the furnishing material and labor in the installation of heating and ventilating systems in the High School, Lincoln School and Lowell School buildings. Plans and specifications are on file at the office of E. Bruell and at the office of the Burdett Bros. Co., Engrs., 8506 Lake Ave., N. W., Cleveland, Ohio.

COLUMBUS, OHIO.—J. J. Henry, who represents an Eastern syndicate, has been contemplating the erection of a central electric power station in the Hocking Valley, near Beaumont, and has options on the electric light and power plants at Nelsonville, Logan, Lancaster and other towns in the Hocking Valley, according to reports, and will furnish light and power to all these towns from the proposed central station.

EAST LIVERPOOL, OHIO.—The merger of nine street railway, electric light and heat companies was completed at a meeting held here and the officers who will at once assume control issued a statement in which it is said that the headquarters of the holding concern, the Tri-State Railway & Electric Co., would be located in this city. This company was recently incorporated under the laws of Ohio and is financed by J. G. White & Co., of New York, and the Drexels of Philadelphia. Included in the merger are the Beaver County Light Co., Midland Electric Light & Power Co., the Ohio River Passenger Railway Co., East Liverpool; the East Liverpool Traction & Light Co., Steubenville & East Liverpool Railways & Light Co., Steubenville & Wellsburg Traction Co., Tri-State Traction Co., Steubenville, Wellsburg & Wierton Railway Co., and the Wellsburg Electric Light, Heat & Power Co., Wellsburg, W. Va.

KOKOMO, IND.—The Kokomo, Marion & Western Traction Co. will place contracts for building a new power plant. A 1,000-HP. boilers, stokers, a 200-ft. smokestack, coal-handling apparatus and other equipment will be installed. P. H. Palmer, Kokomo, is Ch. Engr., and George J. Marott, Indianapolis, Ind., is Pres. Noted Feb. 23.

YORKVILLE, ILL.—Bids for a hydro electric power plant will be received at the office of F. W. Simpson, Secy., Yorkville, until noon, May 10, for the construction of a dam across the Fox River at Millhurst, Ill.; for the construction of a power-house with wheel pits and tail races complete for four 210-HP. turbines; four 175-KW. generators with switchboards and instruments complete. Plans and specifications can be seen at the office of F. W. Simpson, Yorkville, Ill., and at H. D. Hallett's, Engr., Aurora, Ill.

CHAPPELL, NEB.—See item under Water Supply-Irrigation.

✚MILWAUKEE, WIS.—The Dept. of Pub. Wks. has awarded the contract for furnishing 63,000 ft. of vitrified clay conduits for the police and fire departments to the GRAND LEDGE CLAY WORKS, Grand Ledge, Mich. Harry E. Briggs is Comr.

MOSINEE, WIS.—The Mosinee Electric Light & Power Co. has effected a permanent organization and will proceed with the construction of an electric light and power plant at once. The capital stock is $25,000. The officers are A. von Berg, Pres.; Arden Paronot, Secy.; J. P. Kanter, Gen. Mgr.

CHIPPEWA FALLS, WIS.—H. M. Byllesby & Co., Chicago, Ill., have taken the option on the new dam and water power at Jim Falls, on Chippewa River, near this city, at $1,500,000, and propose to construct an electrical power transmission line from Jim Falls to St. Paul and Minneapolis, Minn.

SPARTA, WIS.—See item under Miscellaneous Contracts—Signal System, Sparta, Wis.

DES MOINES, IOWA.—Negotiations for the construction of a water-power plant to develop 4,000 HP. were completed in Fort Dodge recently by E. T. Meredith, James R. Martin, Geis Botsford and other Des Moines men. The plant will be built about ten miles south of Fort Dodge on the river. A dam 740 ft. long and 41 ft. high will be built. Transmission lines will run to Lehigh and either Fort Dodge or Webster City. The water will back from twelve to fourteen miles and will overflow about 740 acres of land. The plant complete, with auxiliary steam plant, will cost about $612,000.

HOUSTON, TEX.—Bids will be received until April 21 for a heating system to be installed in the administration building, mechanical laboratory and power-house at the William M. Rice Institute, by Edgar Odell Lovett, Pres., 1110 Scanlan Bldg., Houston. Plans and specifications may be seen at the office of Cam, Goodhue & Fergueson, Archs., Scanlan Bldg.

✚HOUSTON, TEX.—The officers of the William M. Rice institute announced that the contract for the electric installation in the administration building, the mechanical laboratory and power plant of the institute had been awarded to the NEWBERY ELECTRIC CO., St. Louis, for the electrical equipment, at $18,960.

BOLEY, OKLA.—A company is organized to be known as the Boley Light, Power & Mfg. Co. J. O. Williams and J. R. Reynolds, Marshall, Tex.; J. H. McRiley and D. J Turner, this city, are the directors, it is stated.

BOISE, IDAHO.—Bids will be received at the office of the U. S. Reclamation Service, Los Angeles, Cal., until 2 p. m., April 27, for furnishing electrical apparatus for the Boise project, as follows: Three vertical alternating current generators with direct connected exciters, and three 3-phase air-blast transformers, together with controlling switchboard, oil circuit breakers, lightning arresters, disconnecting switches, motor-driven air compressor and all wire, insulators and accessories necessary for the proper installation and operation of this electrical equipment.

✚PHOENIX, ARIZ.—The Governor of the Water Users' Association has awarded the contract for all machinery for the south side power-house of South and Consolidated canals, east of Mesa, to following contractors: S. MORGAN SMITH CO., York, Pa., for hydrant turbines, at $16,590, which includes 48 turbine wheels and all the governors, pumps and auxiliary; the GENERAL ELECTRIC CO., contract for electric part of plant which includes two generators and corresponding transformers and switchboard apparatus at $30,000. About four months will be taken to complete and deliver machinery, meantime building will be made ready and necessary short piece of connecting canal completed.

✚SEATTLE, WASH.—The contract for installing cluster lamp standards on Third Ave. has been awarded to R. E. DOWNIE, Seattle.

ELGIN, ORE.—A site for an electric power plant has been secured here on the Wallowa River by a recently organized company known as the McCully-Rumble Power Co. F. D. McCully, Joseph, Ore., and E. W. Rumble, La Grande, Ore., are promoters. The company will supply light and power to local towns. About 1,000 HP. will be developed. J. R. Thompson, Portland, Ore., is Engr.

NEWPORT, ORE.—Henry Hewitt and Seymour H. Bell have purchased the franchise and power plant, formerly owned by the Newport Power Co. About $30,000 will be expended. A new building, new machinery and a new wiring system throughout the city are contemplated. The new company will be known as the Yaquina Electric Co.

ASTORIA, ORE.—The City Surveyor has completed a preliminary survey for the proposed extension to the City Park to be built by the Pacific Light & Power Co. Plans and specifications have been forwarded to the office of the company in Portland.

AUBURN, CAL.—The Board of Supervisors has granted a franchise to the Great Western Power Co. to construct a pole line along the Rocklin-Folsom Road and other roads in the county, for the distribution of electricity for light and power.

✚LOS ANGELES, CAL.—The Bd. of Supervisors, Los Angeles County, has awarded a franchise to the EAGLE ROCK WATER CO. to construct an illuminating system for streets and for commercial lighting.

OAKLAND, CAL.—Plans for improvements estimated to cost $500,000 are about completed by the Oakland Gas, Light & Heat Co. Recently a contract was signed by officers of the company for the installation of a 20,000-HP. of 16,000-KW. turbo-generator. The installation of this generator will require the use of extra boiler power. This will practically double the present capacity of the electric plant of the company. F. A. Leach, Jr., Mgr., of the Oakland Gas, Light & Heat Co., announces that additional machinery will probably be operating by November. About $100,000 will be spent by the company in the extension and improvement of the gas distributing system, and $500,000 for the extension of the electric system the new plant will provide for.

SAN DIEGO, CAL.—The San Diego Gas & Electric Co. has procured a permit to construct a gas holder, 175 ft. long, to consist of four lifts of 140 ft. diam. each, to cost about $125,000. Base will be built of steel and concrete. The capacity will be 2,000,000 cu. ft.

MAGOG, QUE.—The construction of a municipal electric light and power plant is assured by A. Tourigny, Secy. and Treas., it is reported. Estimated cost, $100,000. Pringle & Sons, Montreal, are the Engrs.

KINGSTON, ONT.—Bids will be received until April 25 by Alexander Johnston, Dept. Minister Marine & Fisheries, Ottawa, for maintaining lights on Rideau Canal, between Mud Island and Kingston, for a period of three years.

Bids will be received until April 25 by G. R. Geary, Ch. Bd. of Control, for lightning arresters. Specifications may be seen at the office of Toronto hydro-electric system, City Hall.

## BRIDGES.

(✚*Denotes a contract awarded.*)

BOSTON, MASS.—Bids will be received until April 21 for building a temporary draw at the Dover St. Bridge. Louis K. Rourke is Comn. Pub. Wks.

CAMDEN, N. Y.—The town will build a steel bridge over Fish Creek. Paul Schultze, County Engr., will draw the plans.

TROY, N. Y.—The New York Central & Hudson River R. R. Co. will construct a 3-arch concrete bridge at a cost of $50,000 to replace the temporary pile trestle over the Poestenkill at their Madison freight yard at Troy.

CHESTER, PA.—See item under Electric Railways.

*READING, PA.—Bids will be received by A. L. Rhoades, County Controller, until 10 a. m., April 26, for the erection of two reinforced concrete bridges in Berks County, Pa., as follows: Bordners Bridge No. 1, over Tulpehocken Creek, about seven miles from Robesonia, Pa., and Bordners Bridge No. 2, over the Tulpehocken Creek, [illegible] six miles from Myerstown, Pa. Plans [illegible] specifications can be had at the office [illegible] County Commissioners.

✚YARDLEY, PA.—We are [illegible] advised that the contract for [illegible] concrete arch bridge over the [illegible] at Yardley was awarded, on [illegible] F. M. TALBOT CO., 1 Madison [illegible] York, N. Y. The estimated cost of the structure is $500,000. Noted on M[illegible]

*EASTON, PA.—We are officially advised that bids for constructing a [illegible] crete bridge with one 100-ft. [illegible] 92-ft. spans, and an aproximate [illegible] 65-ft. were received on April 18 by [illegible] sioners of Northampton County [illegible] Smith & McCormick, Easton, $1[illegible]; Concrete Co., Harristown, P[illegible]; Whiting, Moddleton Co., Ba[illegible] $116,250; Nelson Merydith Co[illegible] burg, Pa., $124,000. Noted on [illegible]

RICHMOND, VA.—Bids will be [illegible] P. St. J. Wilson, State Highway [illegible] noon, April 26, for constructing [illegible] crete bridge over the Slate River [illegible] ingham County, and a 119-ft. [illegible] South Anna River, in Hanover Co[illegible] may be secured from the Chili[illegible] Co., Richmond, Va.

YORKVILLE, S. C.—Bids will [illegible] by Thomas W. Boyd, County S[illegible] 11 a. m., April 21, for constructing [illegible] steel bridge across Crowdier's [illegible] miles east of Clover, S. C.

JACKSONVILLE, FLA.—The C[illegible] ers of Duval and Nassau Counties [illegible] cided to construct a bridge over [illegible] sau River, at a cost of $10,000.

ELIZABETHTOWN, KY.—Bids will be received by W. C. Montgomery and C[illegible] Taylor, Comrs., until April 20, for [illegible] bridge 250 ft. long over the S[illegible] River. The estimated cost is $50,000.

BELLEFONTAINE, OHIO.—Plans are being prepared for the construction of a [illegible] bridge over Bluejacket River on Main St. John R. Fawcett is City Clk.

CINCINNATI, OHIO.—F. H. Shipley, City Engr., has estimated the cost of constructing the foundations and substructure of the Gilbert Ave. viaduct, at $71,500.

CLEVELAND, OHIO.—We are officially advised that bids will be received until April 29 for constructing the Dunham Road viaduct. The estimated cost of the substructure is $61,813, of the superstructure, $33,250. A. M. Felgate is Bridge Engr. of Cuyahoga County.

✚COLUMBUS, OHIO.—The County Commissioners have awarded the contract to construct the approaches to Eberly bridge over Alum Creek to H. E. BARTHMAN, Columbus, Ohio. The work includes 21,581 cu. yds. of fill and 2,866 tons of broken limestone.

✚COLUMBUS, OHIO.—The Board of County Commissioners has awarded the contract for the construction of the superstructure of the Wilson bridge to the MT. VERNON BRIDGE CO., Mt. Vernon, Ohio.

✚GERMANTOWN, OHIO.—We are officially advised that the contract for constructing a bridge over Little Twin Creek was awarded on April 11 to CHARLES BIRD, Springfield, Ohio, at $6,295.

NEWARK, OHIO.—We are officially advised that all bids were rejected by the Commissioners of Licking County on April 12 for the following bridge work: Constructing the superstructure of the Cortier bridge over the South fork of Licking River in Lima Township; the superstructure for the same bridge; reinforced concrete arch over Dutch fork in Licking Township; reinforced concrete arch over Quarry run in Licking Township; reconstructing the substructure of the Alfred Wells bridge in Union Township; reconstructing the substructure and erecting the superstructure over a branch of Lake fork in Washington Township; constructing the substructure for the McFadden bridge over a branch of Clear fork in McKean Township. New bids will be received until May 10. F. T. Mercer is Deputy Audr.

NORWALK, OHIO.—Bids will be received by the Board of County Commissioners until April 24 for constructing the substructure of the Garrett bridge and two concrete abutments.

BLOOMFIELD, IND.—Bids will be received by the Commissioners of Green County until 2 p. m., May 1, for the construction of three bridges of 70, 60 and 40-ft. spans, respectively. C. H. Jennings is County Audr.

DECATUR, IND.—Bids will be received by the Commissioners of Adams County until 10 a. m., May 2, for the construction of four bridges and six arches, and the repair of three bridges. H. S. Michaud is County Audr.

✚PETERSBURG, IND.—HARLEY KINMAN, Petersburg, has been awarded a contract for the construction and repair of 26 bridges in Warrick County, and for the construction and repair of eleven bridges in Spencer County.

SHELBYVILLE, IND.—Bids will be received by the Commissioners of Shelby County until 10 a. m., May 8, for the construction of a bridge in Sugrar Creek Township, and for the construction of concrete abutments and the repair of the St. Paul bridge. G. B. Huntington is County Audr.

GUTHRIE CENTER, IOWA.—Bids will be received until April 26 by the Commissioners of Guthrie County for constructing a 40-ft. reinforced-concrete deck girder bridge.

ESTHERVILLE, IOWA.—Bids will be received by the Board of Supervisors of Emmet County until noon, April 26, for constructing several reinforced-concrete or steel bridges, according to plans and specifications on file with C. A. Root, County Audr.

MASON CITY, IOWA.—Bids will be received by the Board of Supervisors of Cerro Gordo County, until 2 p. m., April 25, for bridge construction as follows: Two con-

crete slab bridges; one 50-ft. concrete arch bridge; one 32-ft. girder bridge; two steel bridges, with alternate designs for concrete. A. S. Clark is County Audr.

TOPEKA, KAN.—Bids will be received by the Board of Commissioners of Shawnee County at the office of the County Clerk until noon April 28, for furnishing and erecting one two-span 140-ft., center to center steel bridge across the Kansas River near Valencia, Kansas, according to plans and specifications on file in the office of S. G. Zimmerman, County Clk.

ELDORADO, KAN.—Bids will be received by the Commissioners of Butler County some time in May for the construction of a double span concrete bridge near Whitewater. C. W. Burk is County Surv.

✚KANSAS CITY, KAN.—We are officially advised that the contract for repairing the Fifth St. bridge over Kansas River was awarded on April 10 to the WESTERN BRIDGE CO., at $9,400. The other bidders were: A. E. Harper, $10,250; Missouri Bridge & Iron Co., $11,421; Midland Bridge Co., $12,[illegible]; Missouri Valley Bridge & Iron Co., $13,[illegible]; Illinois Steel Bridge Co., $16,744; Kansas City Bridge Co., $14,700; A. M. Blodgett Construction Co., $14,500. Noted on April 6.

✚PROSSER, WASH.—We are officially advised that the contract for constructing a steel bridge and abutments was awarded on April 4 to the SECURITY BRIDGE CO., Minneapolis, Minn., to cost $23,075. The other bidders were: O. H. Stratton, $23,600; Minneapolis Steel & Machinery Co., $23,725; Washington Engineering Co., $26,640; International Contract Co., $23,824. Noted on March 30.

SACRAMENTO, CAL.—The County Surveyor has been instructed to prepare plans for the construction of a bridge over the American River, to cost $30,000.

✚OWEN SOUND, ONT.—We are officially advised that bids for constructing a reinforced-concrete arch bridge, steel superstructure, span 53 ft., width 40 ft. at Ninth St., and a reinforced-concrete arch bridge, steel superstructure, span 66 ft., width 66 ft. at Tenth St., have been received as follows: Corbett Machine Works, Ninth St. bridge, $13,500; Tenth St. bridge, $18,000; CLARKE & GREEN, $9,327, $17,351 (awarded contract on Tenth St. bridge); Grier & Lethbridge, $10,807, $16,775; J. Walker, $8,917. $16,850. Noted on March 30.

DAUPHIN, MAN.—Bids will be received by J. W. Johnston, Secy.-Treas., until noon, May 6, for constructing two 70-ft. steel bridges over the Vermillion River at Dauphin. Copies of the specification may be obtained from the Chief Engineer, Department Public Works, Parliament Bldgs., Winnipeg, Man.

## BUILDINGS.

(*Denotes that this work is advertised in Engineering News.)

*RICHFORD, VT.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until May 27, for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office and custom-house at Richford, Vt. Drawings and specification may be obtained from the Custodian of site at Richford, Vt., or at the discretion of the Superv. Arch.

✚BOSTON, MASS.—The contract has been awarded to A. VARNERIN, INC., at $108,729 for the construction of a schoolhouse in Phillips Brooks District. Other bidders were: Whiton & Haynes Co., $110,300; John F. Griffin Co., $110,350; J. E. Locatelli Co., $114,651; Wm. Crane, $118,611; Hooper Water Co., $118,787; McGahey & O'Connor, $120,597; Conners Bros., $126,105. W. F. Kearns, $129,474.

BOSTON, MASS.—Bids will be received until April 28 for the construction of the George T. Angell Elementary School, Roxbury Dist. Charles Logue is Chmn. School House Com.

SPRINGFIELD, MASS.—Plans have been prepared by Frank W. S. King for the erection of a church, to be constructed of granite for the Faith Church congregation. The Rev. Dr. Frank W. Merrick is rector. The estimated cost is $70,000.

DERBY, CONN.—L. W. Robinson, 324 Exchange Bldg., New Haven, is preparing plans for a large addition to the high school here. The special committee in charge consists of C. H. Nettleton. Dr. E. O'R. Maguire and H. T. Waters.

✚GREENWICH, CONN.—F. ST. GEORGE SMITH, Greenwich, Conn., has been awarded the contract for the erection of a residence and garage on Putnam Ave. for E. H. Mulford, 110 Lafayette St., New York. The plans are by Rowe & Keyes, 161 Devonshire St., Boston, and require a building of wood and stucco, 100 × 40 ft., with tile roof, to cost about $50,000.

✚HARTFORD, CONN.—R. F. JONES, Hartford, has been awarded the contract for a residence on Prospect St. for A. H. Pease. It will be of brick, 50 × 100 ft., with limestone trim. La Farge & Morris, New York City, are the Archs.

NEW BRITAIN, CONN.—Bids are now being received from plans by Arch. W. P. Crabtree for an addition to the High School on South Main St. The additions will be three stories high and fireproof, one 66 × 106 ft. and one 82 × 182 ft., of light pressed brick with limestone trim and granite sills and steps.

Unkelbach & Perry have completed plans for a new clubhouse to be erected on Arch St. for the New Britain Turner Society. It will be a brick building, 50 × 175 ft., four stories high, with velvet brick front and terra cotta trim.

✚NEW HAVEN, CONN.—V. J. HEDDEN & SONS, 1 Madison Ave., New York, general contractors for the construction of the new Taft Hotel at Chapel and College Sts., have awarded the sub-contract for the carpenter work to JOHN RONZOR, 71 South Wyandot St., Dayton, Ohio.

NEW LONDON, CONN.—Dudley St. Clair Donnelly is preparing plans for a 3-story, fireproof brick and reinforced-concrete storage building, 68 × 50 ft., for B. B. Gardner, on Blackhall St.

SOUTH MANCHESTER, CONN.—Plans for the new building to be erected at Main and East Center Sts. for King David Lodge, I. O. O. F., are being prepared by Archs. E. N. & R. E. Spaulding, Suffield, Conn. The building will be of brick, fireproof construction, two stories high and 60 × 100 ft. William L. Buckland, Manchester, is Chn. of Building Committee.

STAMFORD, CONN.—O. E. Horn & Sons, 1146 Broadway, New York, are preparing plans for a new theater on Bank St. for Benjamin Harris. The building will be about 75 × 130 ft., of brick and stone, with a seating capacity of 1,500, and will cost about $60,000.

✚The contract for the construction of a new church for the First Church of Christ Scientist on Prospect St. has been awarded to the V. J. HEDDEN CONSTRUCTION CO., 1 Madison Ave., New York.

NEW YORK, N. Y.—The estate of Hugh J. Grant will erect a 7-story cold storage warehouse, 40 × 83.4 ft., on the south side of Gansevoort St., 186 ft. east of West St. Plans filed by J. G. Glover, Arch., place the cost at $55,000.

The Pine Hill Crystal Spring Co. will erect a 14-story stable, 74 × 100 ft., on the southwest corner of Tenth Ave. and 36th St. Plans have been filed by G. F. Pelham, 507 Fifth Ave. The estimated cost is $50,000.

Plans have been filed by Edward J. Byrne, 3029 Third Ave., for the construction of a 4-story building, 50 × 87.8 ft., at 186th St. The estimated cost is $45,000.

An 8-story building for automobile makers will be constructed at 64th St. and West End Ave. The site has already been purchased from L. Ottinger by the Van Wert Co. The Libman Contracting Co., 1968 Broadway, will erect the 8-story and basement building from plans prepared by Nats & Springsteen. A powerful air compressor in the basement will provide compressed air to tenants for pumping tires and cleaning cars. Gasoline tanks for each tenant will be on the ground floor close to a large pump room.

Plans have been filed by Moore & Landsiedel, 149th St. and Third Ave., for the construction of a 6-story flat, 92.6 × 90 ft., on the southeast corner of Northern Ave. and 179th St., for the Birch Realty Co. The estimated cost is $150,000.

A site, 150 × 100 ft., has been purchased by Maximilian Zipkes, Arch., 103 Park Ave., on the east side of Claremont Ave., 100 ft. south of 125th St. He has organized a new company which will erect a 6-story elevator apartment house. The estimated cost is $450,000.

Plans are being prepared by Harry T. Howell, Willis Ave. and 149th St., for the construction of a 5-story flat building to be erected on the southeast corner of Home and Simpson Sts. in the Bronx, by the J. & H. Schmodt Construction Co. The estimated cost is $50,000.

Plans have been filed for the construction of a 12-story loft building on the north side of 26th St., 144 ft. east of Seventh Ave. The Fabian Construction Co., 3852 Broadway, is the owner. The estimated cost is $450,000.

Plans have been filed by Thomas W. Lamb, 501 Fifth Ave., for construction of a 7-story theatre and store building at the southwest corner of East Houston and Christie Sts., for the Minsky Realty Co. The estimated cost is $250,000.

The estate of Joseph Larocque has been leased by Pease & Elliman, 156 Broadway, to P. W. French & Co., 6 East 56th St., for 21 years. The building, to be erected for their exclusive occupancy, will contain galleries for the exhibition of tapestries and works of art. The building will be of special fireproof construction and contain burglar-proof vaults.

Plans have been filed by Crow, Lewis & Wickenhoefer, 200 Fifth Ave., for the construction of four additional stories to the Sloane Maternity Hospital, on the northeast corner of Amsterdam Ave. and 59th St. The trustees of Columbia College are the owners. The estimated cost is $60,000.

The Jerry McAuley Mission, 316 Water St., will raze the present building and in its place erect a modern mission containing chapel, dormitories, etc. The estimated cost is $100,000. John H. Wyburn is Supt.

A 12-story-loft building will be erected by Brody, Adler & Kock, 132 Nassau St., on the south side of 17th St., 220 ft. west of Fifth Ave. Schwartz & Gross, 347 Fifth Ave., are the Archs. The estimated cost is $150,000.

The White Automobile Co., 205 West End Ave., will erect a large fireproof automobile garage on the north side of 57th St., between Eleventh and Twelfth Aves. Plans have been prepared by Clinton J. Warren, 294 Washington St., Boston, Mass.

Plans have been prepared by Freeman & Hasselman, 39 West 38th St., for the erection of the Lambs Club at 132-134 West 44th St. A 12-story structure, fireproof, with an exterior of light limestone marble and terra cotta, is proposed. The probable cost is $350,000.

✚The contract has been awarded to GEORGE VASSAR'S SON & CO., 1170 Broadway, for the construction of a residence for S. R. Bertron at 14 East 76th St. The cost is about $100,000.

Plans have been prepared by Schwartz & Gross, 347 Fifth Ave., for the construction of an apartment house at the southwest corner of Central Park West and 87th St. Bing & Bing, 505 Fifth Ave., are the owners.

Plans are being prepared by Moore & Landsiedel, 148th St. and Third Ave., for the construction of a 5-story tenement building to be erected on the east side of Eagle Ave., north of Westchester Ave., in the Bronx. The G. Evans Construction Co. is the owner. The estimated cost is $50,000.

Harry T. Howell, 149th St. and Third Ave., is preparing plans for the construction of a building on the north side of 149th St., west of Melrose Ave., for the Bronx National Bank, 149th St. and Bergen Ave.

✚The general contract has been awarded to E. E. PAUL CO., 1 Madison Ave., for the construction of a 4-story, fireproof memorial home for girls, to be erected at Christopher St. and Waverly Pl. J. Duke Harrison, 23 East 27th St., prepared the plans.

Plans have been prepared by Robert E. La Velle, Southern Boulevard and Freeman St., for the construction of three 5-story tenement buildings to be erected on the east side of Vermilyea Ave., 100 ft. north of Emerson St. The estimated cost is $180,000. The Allen Construction Co., 1282 Southern Boulevard, is the owner.

NEW YORK, N. Y.—The following bids have been received by the Dept. of Education for the construction of Public School 47: T. A. Clark Co., Briggs Ave. and 196th St., New York, $253,300; Paul J. Exner, $261,800; Chas. H. Peckworth, $259,440; George Hilderbrand, $268,773; Thos. McKeon, Inc., $271,333; Richard E. Henningham, $266,684; James McArthur, $315,000; H. C. Stowe Construction Co., $256,300; Peter Cleary, $267,000.

Plans are being prepared by Clinton & Russell, 32 Nassau St., for the extension of the 17-story building of the American Exchange National Bank over the adjoining plot at 132 Broadway.

NEW YORK, N. Y.—The Twenty-Fifth Construction Co., 31 East 27th St., has filed plans for the erection of a 12-story store and loft building at 29th St., east of Seventh Ave. The estimated cost is $250,000.

NEW YORK, N. Y.—A 3-story theatre will be erected on the southeast corner of Wadsworth Ave. and 181st St., by G. L. Lawrence. The estimated cost is $50,000.

The Birch Realty Co. will build 6-story flats, 92.6x90 ft., on the northeast corner of Northern Ave. and 178th St., from plans filed by Architects Moore & Landsiedel, 148th St. and Third Ave.

Otto Strach, 218 East 23d St., will enlarge the 9-story loft building on the south side of 23d St., east of Third Ave. The extension will be nine stories high. The estimated cost is $100,000.

NEW YORK, N. Y.—Bids will be received by the Department of Education, 59th St. and Park Ave., New York, will receive bids until May 1, for the general construction, etc., of new Public School 40, on the southerly corner of Pacific and Union Hall Sts., Jamaica, Boro. of Queens.

*FORT TOTTEN, N. Y.—Bids will be received in triplicate until May 8 by the Constructing Q. M., U. S. A., for the construction of an addition to the post hospital (including plumbing, heating, electric wiring, fixtures, etc.). For further details see advertisement.

UTICA, N. Y.—Ford S. Anderson, Manager and Lessee of the Orpheum Theater, Lafayette St., announces that the building will be remodeled and enlarged at a cost of between $65,000 and $70,000. E. C. Horn's Sons, New York City, are preparing plans.

✚ROCHESTER, N. Y.—A. W. HOPEMAN & SONS CO., 569 Lyell Ave., have been awarded general contract for construction of School No. 29 on Oakman St., 195 × 120 ft., to be three stories. Plans prepared by J. Foster Warner, Granite Bldg. The estimated cost is $160,000.

SCHENECTADY, N. Y.—The Common Council has passed an ordinance appropriating $114,000 for a high school. This represents the cost exclusive of the heating and ventilating systems.

SYRACUSE, N. Y.—Esenwein & Johnson, 777 Ellicott Square Bldg., Buffalo, are completing plans for a 7-story and basement store and office building to be erected on South Salina St. by Isaac Rosenbloom. The estimated cost is $125,000.

ALBANY, N. Y.—According to press reports a conference of commercial bodies throughout the state interested in the Barge Canal and its proposed terminals, organized under the auspices of the New York Board of Trade and Transportation about a month ago, held its first session on April 13 and agreed on a bill which will soon be presented to the legislature. In this measure the expenditure of $18,600,000 for terminal purposes is provided for.

MIDDLETOWN, N. Y.—Preliminary plans are being prepared by Carrere & Hastings, 225 Fifth Ave., for the construction of a brick and stone edifice for the Westminster Presbyterian congregation. The Rev. E. Van Dyke Wright, 54 East Main St., is pastor. The probable cost is $80,000.

✚OSWEGO, N. Y.—THE AMSTERDAM BUILDING CO., 43 West 27th St., has been awarded the general contract for the erection of the proposed Oswego Hotel for the Oswego Hotel Corporation. The probable cost is $175,000. The structure will be four stories high with reinforced-concrete floors and columns with an exterior of hollow tile and stucco.

ROCHESTER, N. Y.—A 7-story stone and steel fireproof office building will be erected at State St. by the Eastman Kodak Co., George Eastman, Pres., 343 State St. The owner has prepared the plans and will receive bids in May.

✚SCHENECTADY, N. Y.—The contract has been awarded to BROWN & LOWE, Schenectady, at $197,000 for the construction of the proposed high school annex building.

✚EAST ORANGE, N. J.—The contract has been awarded to ABEL BOTTOMS & SONS, 41 South 15th St., Philadelphia, Pa., at $86,727 for the construction of a public school building.

EAST ORANGE, N. J.—Bids will be received until April 24 by the Board of Education for various alterations and improvements to the high school. Plans have been prepared by Guilbert & Betelle, 917 Broad St., Newark, N. J.

PASSAIC, N. J.—The Russian Creek Orthodox congregation will erect a church at Third and Monroe Sts. The estimated cost is $70,000. The Rev. Elias Kleptowsky is priest in charge.

✚HARTFORD, PA.—The contract has been awarded to METZGER & WELLS, Heed Bldg., Philadelphia, Pa., for the construction of three 2½-story stone buildings for A. A. Hirst, at $45,000. D. K. Boyd is Arch.

PHILADELPHIA, PA.—The Adath Jeshurun congregation will erect an edifice on the east side of Broad St., north of Diamond St. The estimated cost is $100,000.

✚The contract for a 2-story auto salesroom and garage at 660-66 North Broad St., to be built for Samuel Sternberger, has been awarded to JAMES G. DOAK & CO., 1420 Chestnut St. It will be a brick and concrete building, 80 × 100 ft., and will cost about $50,000. The plans were prepared by Sauer & Hahn, Archs.

A Roman Catholic high school for girls will be erected at Nineteenth and Wood Sts. Plans have been prepared by Ballinger & Perot, 1211 Arch St., Philadelphia. The estimated cost is $100,000.

PITTSBURG, PA.—The F. B. Stearns Automobile Co. will erect a garage at Louisa St. near Schenley Park. The estimated cost is $50,000.

READING, PA.—The Board of Trustees will receive bids until April 24 for the erection of a public library. Charles H. Hunter, 30 National Bank Bldg., is Secy. Alex. F. Smith, Baer Bldg., is Arch.

✚PHILADELPHIA, PA.—WILLIAM R. DOUGHERTY has been awarded a contract for the erection of an addition to the dormitories of the University of Pennsylvania. It will be four stories high, 72 × 41 ft., and will provide space for 52 students' rooms. The cost is $65,000.

BALTIMORE, MD.—The Western Maryland Ry. has purchased a site in the block bounded by High, Hillen and Front Sts., and will commence the construction of the proposed Hillen Station. B. F. Bush is Pres.

✚LUTHERVILLE, MD.—The contract has been awarded to JOHN COWAN for the construction of the new buildings for the Maryland College for Women at Lutherville.

WASHINGTON, D. C.—The All Souls Unitarian congregation will erect a church at L and Vermont Ave. The estimated cost is $300,000.

DANVILLE, VA.—Bids will be received until April 21 by the School Board for the construction of a school here. Pettit & Cave, Herman Bldg., Danville, Va., are Archs.

CHARLOTTE, N. C.—Plans for the erection of a 12-story bank and office building at Tyron and Fourth Sts. are being prepared by Mowbray & Uffinger, 50 Liberty St., New York, N. Y. The estimated cost is $225,000.

ATLANTA, GA.—Plans have been completed for the Fulton County court-house by A. Ter Eyck Brown and Morgan & Dillon as associate architects. The estimated cost is $750,000. The structure will be located at Pryor and Hunter Sts.

✚BIRMINGHAM, ALA.—The contract has been awarded to the JOY CONSTRUCTION CO., at $137,450 for the erection of the proposed Y. M. C. A. building.

TALLADEGA, ALA.—Plans for the construction of an $85,000 government building are being formulated. As yet nothing definite has been done. Other building to be done is that of the building and remodelling of the county court-house, which will cost about $40,000. Also of the Alabama Synodical College, costing about $150,000.

GADSDEN, ALA.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until May 27, for the enlargement and completion (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Gadsden, Ala. Drawings and specification may be obtained from the Custodian at Gadsden, Ala., or at the discretion of the Superv. Arch.

GREENWOOD, MISS.—Bids will be received until May 24 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction, complete (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Greenwood, Miss. Drawings and specification may be obtained from the Custodian of site at Greenwood, Miss., or at the discretion of the Superv. Arch.

VILLE PLATTE, LA.—Plans and specifications are being prepared by Emile Weil, New Orleans, for the erection of a court-house. The estimated cost is $80,000.

ANCHORAGE, KY.—Construction work will soon start on the proposed building for the Citizens National Life Insurance Co. McDonald & Dodd, Louisville, Ky., are the Archs. The estimated cost is $60,000.

AKRON, OHIO.—Bids will be received until May 1 by A. L. Thayer, New Castle, Pa., for the construction of a tuberculosis hospital at Akron, Ohio. The probable cost is $100,000.

COLUMBUS, OHIO.—Dr. T. S. Maxwell will receive bids until April 29 for the erection of a public library.

CLEVELAND, OHIO.—The Standard Drug Co. has taken a 99-year lease of the plot at the southeast corner of Euclid Ave. and East Fourth St. for the purpose of erecting a fireproof office building to cost not less than $250,000. Work on the new structure will begin as soon as the present leases of the property expire.

NILES, OHIO.—Bids will be received by the Board of Education until May 4 for the construction of two schools. All bids received on April 5 have been rejected.

OAK HARBOR, OHIO.—Bids will be received by W. A. Campbell until May 6 for the construction of a school building (electric wiring, heating and ventilation, plumb-

ing, drainage, etc.), to be erected at Oak Harbor, Ohio. Plans and specifications prepared by Bacon & Heiber, Archs.

YOUNGSTOWN, OHIO.—Plans have been prepared by R. F. Thompson, Youngstown, Ohio, for the construction of a 10-apartment building to be erected at Edgewood St. by Senator David Todd.

ATHENS, OHIO.—The Board of Education, Canaan Township, will receive bids until May 6 for the construction of a school. L. C. McKonkey, Athens, Ohio, is Clk.

COLDWATER, OHIO.—Bids will re received by the Board of Education April 28 for the construction of a school building in Liberty Township. Andrew Bauer is Clk.

LONDON, OHIO.—D. H. Christopher, Clk. of the Board of Education, will receive bids until May 1 for the construction of a high school building and the remodeling of another school building. W. T. Mills, Columbus, Ohio, is Arch.

LORAIN, OHIO.—Bids will be received by the Board of Education until May 1 for the construction of a high school building. E. Bonnell is Clk.

MT. VERNON, OHIO.—Bids will be received April 24 by the Board of Trustees, Black Township, Knox County, for the construction of a school building.

TOLEDO, OHIO.—M. M. Stophlet, 606 Nasby Bldg., is taking figures on the new 3-story and basement hospital building to be known as the Flower Hospital. Care Dr. E. O. Crist, 2044 Maplewood Ave. Cost, $100,000.

BRAZIL, IND.—Bids were received as follows on April 14 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Brazil Ind.: George Hinchcliff Co., Chicago, $61,800; George W. Stiles Construction Co., Chicago, $57,390; King Lumber Co., Charlottesville, Va., $62,870; August Ohm, Terre Haute, Ind., $62,744; J. C. Halstead & Co., Franklin, Ind., $68,000; J. W. Fairchild, Danville, Ill., $55,100; Conners Bros. Co., Lowell, Mass., $63,989; Isaac W. Milliken, Indianapolis, Ind., $56,300; Ed Henry, Catlettsburg, Ky., $62,429; Christ Kanzler & Son, Evansville, Ind., $65,000; James Corse, Racine, Wis., $57,900; Barnes Bros., Logansport, Ind., $62,000; Harry A. Bishop, Chicago, $58,000; Rogers & Kaiser, Chicago, $78,300.

EVANSVILLE, IND.—H. M. Lukens Co., Evansville, will erect an apartment house at Second and College Sts. The estimated cost is $100,000.

BOYNE, MICH.—Clark & Munger, 414 Shearer Bldg., Bay City, Mich., are preparing plans for a new 3-story and basement hotel, 76 × 96 ft., to be located in Boyne, Mich. The building will contain 50 rooms, main dining room, barber shop and grill room. The estimated cost is $45,000.

GRAND RAPIDS, MICH.—Dr. C. M. Kelley, 233 East Fulton St., Grand Rapids, Mich., is having plans prepared for a 10-story and basement business block, 50 × 123 ft., to be located at East Fulton and Ransom Sts. The estimated cost is $125,000.

JACKSON, MICH.—The state legislature has passed a special appropriation bill of $225,000 for a new cell block for the Jackson State Prison. Nathen F. Simpson, Warden. Cell block will be of brick and steel construction (fireproof). Architects have not been selected.

LEITCHFIELD, MICH.—Clark & Munger, 414 Shearer Bldg., Bay City, Mich., are preparing plans for a church, 45 × 75 ft., for the Leitchfield Baptist Society. The estimated cost is $40,000.

✚MANISTEE, MICH.—The Masons of Manistee, Mich., have awarded the general contract for the new temple to GEORGE LATHERS, Cadillac, Mich., at $40,000.

SAGINAW, MICH.—Cowles & Mutcheller, 5 Chase Bldg., are preparing plans for a church, 62 × 128 ft., with a seating capacity of 450 persons, for the St. Andrews Church Society. Rev. Fr. Vogl, 603 North Hamilton St., Saginaw, Mich., is pastor. The cost is $60,000.

ST. JOSEPH, MICH.—Joseph E. Mills, Washington Arcade Bldg., Detroit, Mich., is receiving bids on a 2-story and basement bank and office building, 66 × 32 ft., for the Union Banking Co. O. O. Jordon, St. Joseph, Mich., is Cashier. The estimated cost is $50,000.

✚CHICAGO, ILL.—The general contract, including caisson, foundation for the $250,000 store and loft building to be erected at the northwest corner of Wabash Ave. and Harmon Ct., has been awarded to WM. CRILLY CO., South Dearborn St.; structural iron to the MORAVIA CONSTRUCTION CO., 35th St. and Stewart Ave.

Bids are being received by S. S. Beman, 606 Michigan Ave., for the steel work of the Hamilton Club's new home, which is to be erected at a cost of $250,000.

L. M. Mitchell, 9 South LaSalle St., has plans under way for the construction of a 3-story apartment building to cost about $50,000. Thomas A. Beckett, 6451 Minerva Ave., is the owner.

✚CHICAGO, ILL.—The contract has been awarded to the AMERICAN BRIDGE CO. to fabricate 11,000 tons of structural steel required in the improvement being made in the Rothschild building in State St.

The St. Peter's Episcopal congregation will erect a church on Belmont Ave. The estimated cost is $80,000.

DELAVAN, WIS.—The Wisconsin Ry. Commission has ordered the Chicago, Milwaukee & St. Paul Ry. Co. to construct a passenger station here.

NEWBURG, WIS.—The Directors of the State Bank of Newburg will receive bids until April 20 for the construction of a brick bank building. Wm. F. Hiltgen, Cedarburg, Wis., is Arch.

CHAWANO, WIS.—The County Board of Supervisors has voted to construct an insane asylum. Bonds to the amount of $100,000 have already been sold.

FENIMORE, WIS.—The Board of Education will receive bids until May 1 for the erection of a combination high and graded school building according to plans prepared by Kemp & Miller, Beloit, Wis. It will be of brick and stone construction, three stories high, with dimensions of 66 × 92 ft.

✚MADISON, WIS.—The contract for the general hospital to be built by this city has been awarded to H. L. STEVENS & CO., of 719 Continental Bank Bldg., Chicago, Ill., who also prepared the plans.

MILWAUKEE, WIS.—H. P. Schnetzky & Son, Archs., are preparing plans and specifications for a cold storage plant and warehouse for E. R. Godfrey & Sons Co., Broadway and Detroit St. It will be eight stories high, 60 × 120 ft., of reinforced-concrete and brick construction. All new refrigerating and cold storage warehouse equipment will be needed.

✚OSHKOSH, WIS.—The Board of Public Works has awarded the general contract for the construction of the Orville Beach Memorial Manual Training School to AUGUST PITZ, Oshkosh, Wis., at $43,920. The structure will be of stone construction and two stories high.

WAUPACA, WIS.—Bids will be received until May 24 by the School Board for the erection of a solid brick and stone school building, including separate bids for plumbing and heating.

AMES, IOWA.—Bids were received as follows on April 17 by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a U. S. post-office at Ames, Iowa: S. W. Dimas, Jr., Construction Co., Columbia, Mo., $64,500; R. D. Connell, Denver, Colo., $52,281; Hiram Lloyd Building & Construction Co., St. Louis, $50,296; King Lumber Co., Charlottesville, Va., $49,900; General Construction Co., Milwaukee, Wis., $48,833; Northern Construction Co., Milwaukee, Wis., $45,791; Carl J. Lange, Appleton, Wis., $48,293; Holladay & Crouse, Greenboro, N. C., $47,172; George W. Stiles Construction Co., Chicago, $44,548; W. D. Lovell, Minneapolis, Minn., $46,000; Conners Bros. Co., Lowell, Mass., $49,800.

DES MOINES, IOWA.—Bids will be received until May 4 by A. R. Corey, Des Moines, Iowa, for the construction of a fireproof machinery building to be constructed at the Iowa State Fair Grounds.

MINNEAPOLIS, MINN.—H. L. Stevens, Minneapolis, Minn., has prepared plans for the erection of a hotel at the corner of Fourth and Hennekin Sts., by the Brunswick Investment Co.

THIEF RIVER FALLS, MINN.—A. H. Fasel, County Auditor, will receive bids until April 22 for remodelling the court-house here.

UPTON, WYO.—Bids will be received by the Board of Trustees of School Dist. No. 1 until April 24 for the construction of a school building; also for the plumbing and heating. James O. Mark is Clk.

ST. LOUIS, MO.—The Third Church of Christ Scientist will erect an edifice at 3524 Russell Ave. The probable cost is $52,000.

CORSICANA, TEX.—Bids will be received until May 1 by C. H. Page & Bro., Austin, Tex., for the construction of a boy's dormitory for the State Orphans Home. The probable cost is $45,000.

HOUSTON, TEX.—According to press reports plans are being prepared for the construction of a 12-story fireproof structure at the corner of Main St. and Texas Ave. The Condas Brothers are the owners.

FORT SAM HOUSTON, TEX.—Bids will be received by P. W. Guiney, Constr. Q. M., U. S. A., until May 10, for the construction of an isolation hospital.

LAWTON, OKLA.—Bids were received as follows on April 17 by the Secretary of the Interior, Washington, D. C., for the construction of a 10-room school building at Lawton, Okla.: McMenry-Beatty Co., East Liverpool, Ohio, $53,947; Lisle-Dunning Construction Co., Oklahoma City, Okla., $58,600; Young & Barrusch, Marysville, Mo., $61,574; King Lumber Co., Charlottesville, Va., $75,000; Newport Contracting & Enginering Co., Newport News, Va., $60,783; L. Crosby & Son, Kansas City, Mo., $54,950.

FORT COLLINS, COLO.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until May 23 for the construction (including plumbing, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office at Fort Collins, Colo. Drawings and specifications may be obtained from the Custodian of site at Fort Collins, Colo., or at the discretion of the Superv. Arch.

TACOMA, WASH.—The First Methodist Church congregation will erect a $125,000 church. The Rev. T. W. Lane is pastor.

SEATTLE, WASH.—Bids will be received until May 1 by Gaggin & Gaggin, University Blk., Syracuse, N. Y., for constructing the Lyman C. Smith building. The probable cost is $2,000,000.

A 3-story brick structure will be erected by the Madison Square Building Co. at Tenth Ave., between Spring and Marion Sts. The estimated cost is $50,000.

PORTERVILLE, CAL.—Bids will be received until April 27 by M. E. Dewitt, Clk. Board of School Trustees, for the construction of a reinforced concrete and brick school. F. W. Griffin, 217 Main St., is Arch.

SAN DIEGO, CAL.—Bids will be received by James Knox Taylor, Superv. Arch., Treasury Dept., Washington, D. C., until May 25 for the construction (including plumbing and ventilation, gas piping, heating apparatus, electric conduits and wiring), of the U. S. post-office and custom-house at San Diego, Cal. Drawings and specification may be had from the Custodian of site at San Diego, Cal., or at the discretion of the Superv. Arch.

MONTREAL, QUE.—Bids will be received until May 1 by R. C. Desrochers, Secy. Pub. Wks. Dept., Ottawa, for the construction of a building for Postal Station "C" at Montreal. Plans can be seen at office of Joseph Perrault, Fairmont Court, Montreal, or at the Dept., Ottawa.

MONTREAL, QUE.—The property at corner of St. Catharine and Peel Sts., occupied by the Scroggie Co., has been purchased by Carrick, Limited, on behalf of a syndicate, who propose to build a large hotel.

VANCOUVER, B. C.—The Duncan Building, now under construction, will be increased to seven stories in height. H. L. Stevens & Co., of 65 Hutchinson Bldg., are designers and builders.

ROSETOWN, SASK.—Bids will be received until May 1 by G. H. Irvine, Secy. School Bd., for the construction of a brick school. Storey & Van Egmond, Regina, Sask., are the Archs.

## WATER SUPPLY—IRRIGATION.

(✚*Denotes a contract awarded.*)

WEARE, N. H.—The cost of constructing the proposed reservoir here has been estimated at about $19,000. J. B. Warren is Town Clk. Noted on March 23.

ALBANY, N. Y.—Plans and specifications for the installation of standpipes and a complete system of fire protection in the State Capitol are being completed by Franklin B. Ware, State Arch., Albany. Estimated cost, including rewiring of building, from $75,000 to $80,000.

✚BOSTON, MASS.—The contract for 500 Post hydrant boxes, 100 Lowry hydrant boxes, 700 gate boxes, 600 meter boxes, and 50 blow-off boxes, was awarded on April 7 by the city to WHITE & KENNELLY, at $4.59 each for all kinds. Other bidders were: J. H. Ferguson, $4.65; Peter W. Hill, $4.80; D. M. Biggs & Co., $4.99; Jacobs & Eagar, $5.05; J. C. Coleman & Sons, $5.37; Chas. M. Callahan, $5.40; W. L. Waples Co., $6.30; $6.85, $6.70, $6.25 and $7.25; Simpson Bros. Corporation, $7.48.

✚Contracts were awarded on April 7 by the city for 750,000 lbs. of No. 1 castings and 200,000 lbs. of No. 2 castings, to the DAVIS & FARNUM MFG. CO. for No. 1 and to MECHANICS IRON FOUNDRY CO. for No. 2, at 2.635 cts. and 2.2 cts., respectively. Other bidders were: Mechanics Iron Foundry Co., 2.7 cts. for No. 1; Davis & Farnum Mfg. Co., 2.335 cts. for No. 2; Trenton Foundry & Machine Co., 2.47 cts. and 2.19 cts., respectively; Foxboro Foundry Co., 2.69 cts. and 2.24 cts.; Lunsden & Van Stone Co., 3 cts. and 2.5 cts.

BOSTON, MASS.—Bids have been received as follows by the city for teaming about 6,000 tons of pipe and castings from the pipe yard to various streets, figures based on per ton haul, less than and more than 2½ miles: Hugh Nawn Contracting Co., 65 cts. and $1.25; A. de Stefano, 70 cts. and $1.31; Charles J. Jacobs Co., 72 cts. and $1.35; Thomas F. Lynch, 70 cts. and $1.40; Charles Duncan & Son, 70 cts. and $1.38.

✚Contract was awarded on April 13 by the city to the HERSEY MFG. CO., for 7,500 ⅝-in. meters at $5, 350 1-in. meters at $10, and 150 1½-in. meters at $19.50.

NEW YORK, N. Y.—Bids were opened as follows on April 12 by Henry S. Thompson, Comr. Water Supply, Gas and Electricity, for furnishing, delivering and erecting a pumping station near the existing driven well plant at Whitestone, Boro. of Queens: Paul J. Exner, 55 East 20th St., New York, $21,850; Masonry Construction Co., $23,889; Concord Construction Co., $25,547; McHarg-Barton Co., $27,870; Mitchell Construction Co., $22,200; Kelly & Kelly, Inc., $25,541; L. J. Wadsworth Construction Co., $23,477; Delaney Roberts Co., $29,413; John T. Woodruff & Son, $25,248; J. N. Knopp, $35,874; Thomas McKeown, Inc., $27,737.

*Bids will be received by the Board of Water Supply, 165 Broadway, New York, until 11 a. m., May 4, for Contract 77, for the construction of the Wakefield Ave. blowoff, a concrete and cast-iron pipe conduit in Wakefield Ave., about one-half mile north of the New York City line, in the City of Yonkers, Westchester County.

*NEW YORK, N. Y.—Bids will be received until 11 a. m., May 16, by the Board of Water Supply, for Contracts 63, 65, 66 and 67. For details, see advertisement in this issue.

*BLAUVELT, N. Y.—Bids will be received until noon, May 2, by the State Board of Armory Commissioners for water and sewerage systems at the New York State Rifle Range, Blauvelt, N. Y.; also for construction work, including plumbing of Mess Hall, Headquarters Building and Latrine. F. A. McNeely is Secy.

✚GENEVA, N. Y.—The contract has been awarded by the Board of Public Works to the SNOW STEAM PUMP CO., Buffalo, N. Y., for furnishing to the Water Department a pump, at about $14,000.

JERSEY CITY, N. J.—New water mains will be laid throughout the city. A bill has been signed by the Governor empowering the Street and Water Board to spend $500,000 for this purpose, the sum of not more than $200,000 to be spent in any one year. Noted on April 6.

*BRISTOL, PA.—All bids received on March 20 for furnishing materials and constructing a complete water-works system and filtration plant have been rejected by the Borough Council, due to technical illegalities.

CATASAUQUA, PA.—The town is considering the construction of a municipal water-works system.

SOMERSET, PA.—Bids are asked by the Borough Council until 4 p. m., April 27, for the construction of a reservoir, the borough to furnish all iron work. Charles I. Shaver is Secy.

WASHINGTON, D. C.—Bids will be received by the Commissioners of the District of Columbia until April 21 for furnishing 4,450 brass corporation cocks and 4,400 curb cocks for lead and iron pipe.

WASHINGTON, D. C.—Bids will be received by Lt.-Col. W. C. Langfitt, Corps Engrs., U. S. A., 920 17th St., N. W., until noon, April 25, for furnish[illegible] and delivering about 200 tons of special [illegible] castings and bolts.

GRAHAM, VA.—The N[illegible] & Western Ry. Co., it is reported, [illegible] improve its pumping station here and [illegible] a new pump. Estimated cost, $10,000. [illegible] J. R. Anderson, Graham.

SOUTH HILL, VA.—Th[illegible] construction of water-works is being consi[illegible] by the city.

ROMNEY, W. VA.—Bids [illegible] be received until noon, May 1, by the [illegible] the installation of a system of water [illegible] the reservoir to be located at Me[illegible] Gap. Estimated cost, $15,000. T. [illegible] Hatton is Design. Engr., Wilming[illegible] A. N. McKeever is Mayor. Noted [illegible] 13.

MILTON, W. VA.—The Mi[illegible] Water Co. composed of Milton business [illegible] has been organized for the purpose [illegible] constructing water-works here.

AMERICUS, GA.—The city h[illegible] $100,000 of bonds for improving the [illegible] water-works and extending the sewer sy[illegible] and for street paving.

FAIRBURN, GA.—The citi[illegible] have voted to issue $20,000 of bonds for [illegible] construction of a water-works system. [illegible] Noted on April 6.

McDONOUGH, GA.—The cost [illegible] constructing a water-works system here [illegible] been estimated at from $30,000 to $35,000. The J. B. McCrary Co., Atlanta, Ga., [illegible] Engr.-in-Charge. Noted on March 23.

✚SPARTA, GA.—The contract [illegible] the construction of water-works and [illegible] here has been awarded by the city to WALTON & WAGNER, of Atlanta, Ga., at about $34,000. The contract includes three mi[illegible] of sewers and purification plant and 3½ m[illegible] of water mains, 4 to 8 in.; two 750,000-ga[illegible] pumps, air compressor, boiler, power house, 100,000-gallon brick reservoir, 80,000-ga[illegible] tank on steel tower, 150 ft. to the top of the tank.

GREENVILLE, ALA.—The citizens have voted to issue $15,000 of bonds for the purchase of duplicate parts for the pumping station. Noted on April 13.

BASSFIELD, MISS.—On April [illegible] the citizens voted to issue bonds for the installation of a water system.

BILOXI, MISS.—The city is considering the extension of the water-works system. Estimated cost, $60,000.

SEMINARY, MISS.—The citizens have voted $10,000 of bonds for the installation of a system of water-works.

✚FERNBANK, OHIO.—Bids have been received as follows by the Village Clerk for furnishing and laying 14,125 ft. of 4-in., 6-in. and 12-in. water pipe, placing 34 fire hydrants, 504 6-in. and 12-in. valves and boxes, and 16,500 lbs. of special castings. Contracts have been awarded as follows: To the U. S. CAST IRON PIPE & FOUNDRY CO. for furnishing the pipe to the BOURBON COPPER & BRASS WORKS CO. for furnishing valves and boxes; to J. H. L. BARR for construction work. Total cost, $14,238.

LAKEWOOD, OHIO.—Bids will be received until noon, May 9, by the Board of Trustees for the erection of an elevated steel water tower on a concrete base. Specifications are on file at the City Hall and at the office of the William H. Evers Engineering Co., The Arcade, Cleveland, Ohio. E. R. Liebler is Clk.

KENTON, OHIO.—The citizens have voted to issue $40,000 of bonds for rebuilding the water-works plant.

URBANA, OHIO.—The city has decided to install a municipal water-works plant.

CLEVELAND, OHIO.—The city is considering constructing the proposed water tunnel of cement blocks. The new tunnel will be an extension of the old tunnel extending out from the Division pumping station.

ROCKPORT, OHIO.—Bids will be received until noon, May 12, by Fred Feuchter, Clk. Bd. of Trustees, for constructing water mains in Settlement Road and Linndale Road. The William H. Evers Engineering Co., The Arcade, Cleveland, Ohio, is Engr.

PERU, IND.—A. T. Maltby, Consult. Engr., Great Northern Bldg., Chicago, Ill., has been engaged by the city to take charge of providing a new and increased water supply and rebuild the water-works plant.

CHICAGO, ILL.—The James A. Brady Foundry Co., Ashland Ave. and 35th St., Chicago, has submitted the lowest bid to B. J. Mullaney, Comr. Pub. Wks., for furnishing and delivering special castings, at $47.80 per ton.

✚LEWISTON, ILL.—We are officially advised that the contract for constructing the water-works system here, bids opened on April 10, has been awarded by the city to the COOK CONSTRUCTION CO., of Des Moines, Iowa, at $6,801.

TOULON, ILL.—Bids will be received by Arthur Shinn, City Clk., until 7.30 p. m., April 28, for the construction of a concrete storage reservoir for a water supply system and for a deep well pump and force pumps, with appurtenances and connections. The W. S. Shields Co. is Engr., 1201 Hartford Bldg., Chicago, Ill.

KENOSHA, WIS.—The Board of Water Commissioners is considering the construction of a new intake in Lake Michigan. M. Greenwald is Pres.

CHOKIO, MINN.—Bids will be received until 11 a. m., April 26, by the village for the following work: A 33,000-gallon reinforced reservoir, 1,000 ft. of 6-in. and 1,000 ft. of 4-in. c.-i. water mains, hydrants, valves, specials, etc.; also for a pumping plant, consisting of air lift, air compressor, triplex power pump; gasoline engine and accessories; concrete or brick pump house, or the following: A 40,000-gallon steel tower and tank, c.i. water main as above, deep well pumping plant, concrete or brick pump house. Bids are asked on each proposition. Plans and specifications are being prepared by Oscar Claussen Engineering Co., National German-American Bank Bldg., St. Paul.

Minn., and may be obtained at the office of the company and at the office of Louis L. Larson, Village Clk.

MADISON LAKE, MINN.—F. B. Knoff, Village Clk., will receive bids until 6 p. m., May 1, for installing a water-works system. John Wilson is Engr., Mankato, Minn.

ELK CITY, KAN.—The city will receive bids about May 1 for the installation of water-works. L. Y. McFarland, Elk City, has prepared plans. Estimated cost, about $25,000.

WATERVILLE, KAN.—The citizens on April 3 voted to issue $30,000 of bonds for the installation of water-works and an electric light plant.

BRIDGEPORT, NEB.—The citizens have voted $17,000 of bonds for the installation of a water-works system.

CHAPPELL, NEB.—We are officially advised that all bids opened on April 8 by the village for the construction of water-works and an electric light plant were rejected. New bids will be received until noon, May 8. Estimated cost, $12,900. W. E. Donner is Engr., Grant Island, Neb.

BROOKINGS, S. DAK.—Bids will be received until April 22 by the City Council for furnishing, hauling and laying about 13 blocks of pipe, special castings, valves, etc. G. H. Stoddart is City Audr.

✚KANSAS CITY, MO.—The contract has been awarded by the Board of Fire and Water Commissioners to the ALLIS-CHALMERS CO., of Milwaukee, Wis., for a self-contained, vertical, triplex-expansion crank and flywheel pumping engine, at $29,500.

FORT SMITH, ARK.—We are officially advised that the city will spend $100,000 in the next year or two for improvements to the water plant recently acquired.

✚BROWNSVILLE, TEX.—The contract has been awarded by the city to J. C. DEBRUIN, of Brownsville, for installing a filtration plant with a daily capacity of 1,000,000 gallons. Estimated cost, $10,000.

EASTLAND, TEX.—The city is considering the construction of a water-works system. Bonds for $13,000 have been issued.

✚FORT SAM HOUSTON, TEX.—The contract has been awarded to the A. J. LOCKETT & CO., New Orleans, La., for furnishing one 1,000,000-gallon Worthington triple-expansion pumping engine, at $9,169.

✚GALVESTON, TEX.—Bids were received on April 3 as follows by the Board of City Commissioners for furnishing material and constructing a water main along the Causeway, from Virginia Point to Galveston Island, requiring about 10,766 lin. ft. of 30-in. c.-i. pipe: ISAAC HEFFRON, Galveston, $66,389, and $6.16 per lin. ft. for any extra 36-in. pipe needed (awarded contract); A. M. Blodgett Construction Co., $70,652 and $6.50; Kelso & Vautrin, Galveston, $72,024 and $7.25; A. L. Patterson, New Orleans, La., $85,051 and $7.90. A. T. Dickey is City Engr.

TULIA, TEX.—The citizens have voted $25,000 of bonds for the construction of a water-works system and an electric light plant.

FORT WORTH, TEX.—We are officially advised that the Board of Engineers for the Water Supply will soon have plans and specifications ready for a dam for an impounding reservoir across the Trinity River, a conduit pipe line of some six miles in length, and a filter plant of from 5,000,000 to 6,000,000 gallons daily capacity, the total cost of which, including lands, will be approximately $1,000,000.

BARTLESVILLE, OKLA.—The city is considering the construction of a system of water-works. Estimated cost, $200,000.

BRAGGS, OKLA.—Winters & Dove, 810 First National Bank Bldg., Fort Smith, Ark., are preparing plans for the construction of a water-works system for Braggs. The election to vote the necessary bonds will be held at an early date.

CORWETA, OKLA.—Winters & Dove, 810 First National Bank Bldg., Fort Smith, Ark., have finished the necessary surveys and are now preparing plans for a water-works extension. The work will include two miles of pipe line, an auxiliary pumping plant and other improvements.

HELENA, OKLA.—The water-works will be extended. Bonds for $10,000 have been voted to carry on the work.

McALESTER, OKLA.—The city is considering the construction of an auxiliary water supply. Estimated cost, $80,000. W. P. Halliday is City Engr.

✚YALE, OKLA.—The contract has been awarded to the W. C. SWANWICK CO., of Joplin, Mo., for the installation of water-works. Bonds for $25,000 have been voted.

FORT LUPTON, COLO.—The citizens, on April 4, voted to issue $25,000 of bonds to install a system of water-works.

GUNNISON, COLO.—On April 4 the citizens voted to issue $90,000 of bonds for the construction of a water system, $70,000 to be issued at once. Burns & McDonnell, Scarritt Bldg., Kansas City, Mo., are Engrs.

NORWOOD, COLO.—On April 4 the citizens voted in favor of issuing $12,000 of bonds for the installation of a water-works system.

OLATHE, COLO.—The citizens have voted $56,000 of bonds for the installation of a municipal water system.

BOISE, IDAHO.—Bids will be received until 2 p. m., April 26, by the United States Reclamation Service, Los Angeles, Cal., for furnishing hydraulic turbines for the Boise project, Idaho.

Bids will be received as above until 2 p. m., May 4, for furnishing about 1,850 tons of steel rails for the Boise project, Idaho.

✚TACOMA, WASH.—The contract has been awarded to GEORGE P. WRIGHT, Tacoma, for laying 37 miles of wooden pipe and about 9,000 ft. of steel pipe in connection with the new Green River gravity water system for Tacoma, at $736,751. Noted on April 13.

✚FALLS CITY, ORE.—We are officially advised that bids have been received as follows by the City Council for the construction of the municipal water-works: JAHN CONTRACTING CO., Portland, Ore., $21,690 (awarded contract); H. Venske, Cottage Grove, Ore., $23,524; K. Swansett, Carvallis, Ore., $25,382; Moffatt & Parker, Oregon City, Ore., $24,290.

SALEM, ORE.—George H. Sutherlin, of Walla Walla, Wash., it is reported, has submitted the lowest bid for laying a water pipe line to the new Eastern Oregon Branch Insane Hospital from the nearest connection with the Pendleton water lines.

✚PORTLAND, ORE.—We are officially advised that the contract has been awarded by the Water Board to the CRANE CO. for about 1,800 ft. of 12-in. and 2,700 ft. of 10-in. lap-welded steel pipe and appurtenances, at $8,186. D. D. Clarke is Ch. Engr. Bd.

DRAIN, ORE.—The citizens have voted $20,000 of bonds, $15,000 to be spent for water-works and $5,000 for sewers.

SAN FRANCISCO, CAL.—The city will ask for bids for laying a pipe line to supply water for Lincoln Park. Marsden Manson is City Engr.

SAN FRANCISCO, CAL.—We are officially advised that all bids submitted to the city for reinforced-concrete intake tunnel for pumping station have been rejected. The lowest bid was $60,000. Engineer's estimate, $45,500. Marsden Manson is City Engr.

✚SUISUN, CAL.—The contract has been awarded to W. B. CONNELLY, of Suisun, for raising the dam of the municipal water system reservoir a distance of 12 ft., whereby it is planned to increase the storage capacity of the lake to 25,000,000 gallons of water.

VALLEJO, CAL.—The contract has been awarded by the city to BRAUN, WILLIAMS & RUSSELL for laying the pipe line from Fleming Hill reservoir to Georgia St., and from Georgia St. to South Vallejo, at $6,041, the lowest of the eight bids submitted. Other bidders were: H. Gould, $10,288; Duncanson, Harrellson Co., $8,434; Moreing & Fitzpatrick, $8,866; William Heafey, $6,393.

PLEASANTON, CAL.—Bids will be received until 7.30 p. m., April 24, by J. H. Neal, Town Clk., for furnishing materials and performing all labor in connection with removing and replacing water mains.

SEBASTAPOL, CAL.—Bids will be received by John S. Saunders, Clk. Bd. of Trustees, until 8 p. m., May 1, for one year's supply of disc water meters.

TORONTO, ONT.—Bids will be received by G. R. Geary, Mayor and Chn. Bd. of Control, until noon, April 25, for the supply of a priming equipment for centrifugal pumps at the filtration plant. C. H. Rust is City Engr.

REGINA, SASK.—Bids will be received until April 30 by the City Commissioners, John Marshall, Ch. Engr., for the supply of one 1,000,000-gallon per 24-hour capacity pump and motor, switchboard and apparatus.

REGINA, SASK.—Bids will be received until noon, April 26, by the City Commissioners for supplying about 900 tons of 18-in. c.-i. pipe and 150 tons of 6-in. c.-i. pipe. L. A. Thornton is City Engr.

## SEWERS.

*(*Denotes that this work is advertised in Engineering News.)*

✚NORTHAMPTON, MASS.—The contract for furnishing sewer pipe to the city for the coming year has been awarded to W. H. RILEY & CO., Boston, Mass., at their bid of 81.5% off the list price, by the Sewer Commission.

PUTNAM, CONN.—Bids will be received by the Highway Committee, Archibald Macdonald, Chn., until 4 p. m., April 21, for the construction of Sewer Contract No. 7, consisting of approximately 940 ft. 15-in., 1,230 ft. 12-in., 1,850 ft. 10-in. and 5,900 ft. of 8-in. pipe. Geo. W. Perry, Putnam, is Engr.

NEW YORK, N. Y.—Bids will be received by the Board of Trustees of the College of the City of New York until April 27 for the work of excavating a sub-drainage tunnel from Amsterdam Ave. underneath the college grounds along the line of 139th St. and across St. Nicholas Park to a connection with the sewer in St. Nicholas Ave., Borough of Manhattan, the City of New York. Plans and specifications may be obtained from George B. Post, 347 Fifth Ave., New York.

The following bids were received on April 13 by the Public Charities, New York, for furnishing all the labor and materials required for the construction of sewers and sewage disposal plant for the Sea View Hospital at the New York City Farm Colony, Borough of Richmond, New York: Delaney Roberts, $16,600; P. P. Farley, $14,725; Bond & McNally, $14,267; Jos. Johnson, $19,880; J. J. Hagerty, $15,100; Frazer-Brazen Co., $19,925; J. M. Heanney, $17,512; Luke A. Burke, 25 West 42d St., New York City, $13,740; T. A. Quinlan, $14,900; F. N. Lewis, $18,550; N. Y. Sewerage Disposal Works, $17,649.

NEWARK, N. J.—Bids will be received by the Board of Street and Water Commissioners until April 27 for installing the following sewers: 12-in. pipe sewer in Wheeler Point Rd., together with an 8-in. branch sewer in Malvern St.; an 8-in. pipe sewer in Stuyvesant Ave., and a 10-in. pipe sewer in Madison Ave.

*SOUTH ORANGE, N. J.—Bids have been received as follows by the Township Committee, South Orange, on April 11 for the construction of sewers for Hilton Dist.: J. J. Fusco, Montclair, N. J., $18,246 (awarded contract); Antonio Costa, Orange, N. J., $20,734; H. Spinach Construction Co., Waterbury, Conn., $21,511; Martin & Miller, Roselle Park, N. J., $22,471; Chas. Ippolito, Orange, N. J., $23,287; Pas. Cestone, Montclair, N. J., $23,803; J. F. Callahan, Elizabeth, N. J., $25,407; John Dorer, Irvington, N. Y., $28,108; Mason Hilton & Co., New York, N. Y., $31,951; Pas. Mauriello, Orange, N. J., $32,984.

MASONTOWN, PA.—Chester & Fleming, Consult. Engrs., Union Bank Bldg., Pittsburg, Pa., are preparing plans for a sewage disposal plant for the Borough of Masontown, Pa., in connection with Mr. E. C. Baker, City Engr.

ROCKHILL, S. C.—Bids will be received until April 2 by the Sewerage Commission for the construction of sewers. E. L. Barnes is Secy.

CANTON, OHIO.—Bids will be received until April 20 for the construction of a sanitary sewer and paving in two streets. Warren L. Barr is Clk.

COLUMBUS, OHIO.—Resolutions have been adopted by the City Council determining to proceed with the construction of a sewer in Maynard Ave., from Summit St. to the alley west of Fourth St., a sewer in the alley west of Neil Ave., from Tompkins St. to the alley north of Blake Ave., and a sewer in Seventh St., from Markinson Ave. to the alley north of Morrill Ave.

DAYTON, OHIO.—Bids will be received until April 21 by the Dept. of Public Service for the construction of sewers in Riverdale and Lakeview Aves. F. J. Cellarius is City Engr.

ELYRIA, OHIO.—Bids will be received until noon, May 8, for the construction of sanitary sewers. The probable cost is $27,000. C. S. Buth is Engr.

GENEVA, OHIO.—Bids will be received by W. E. Morgan, Village Clk., until April 28 for the construction of storm sewers. Cummings & Downer, Painesville, Ohio, are Engrs.

SPRINGFIELD, OHIO.—Bids will be received by the Board of Public Service at the office of W. H. Mahoney, 5 City Bldg., until noon, April 20, for the construction of sewers.

*KOKOMO, IND.—Bids will be received by the Board of Public Works of Kokomo, Ind., until noon, May 1, for the construction of an intercepting sewer, siphons, overflows and connections from 10 to 48 ins. in diameter, about 12,935 ft. long. Plans and specifications may be seen at the office of the Board of Public Wks. Ben. Havens is Clk.

DETROIT, MICH.—The Common Council of the City of Detroit at their meeting of April 11, directed the Department of Public Works, J. J. Haarer, Comr., 104 City Hall, to advertise for bids for constructing the following lateral sewers: Lateral sewer No. 2171, in alleys in block bounded by Cameron, Cardoni, Holbrook and Westminster Sts., estimated cost per lin. ft., $1.30; Lateral sewer No. 2203, in alley in block bounded by Beechwood, Firwood, Larchmont and Seebaldt Sts., estimated cost per lin. ft., $1.40; Lateral sewer No. 2204, in alley in block bounded by Beechwood, Firwood, Sebaldt and Allendale Sts., estimated cost per lin. ft., $1.40; Lateral sewer No. 2205, in alley in block bounded by Mullane, Springwells, Navy and Senator Aves., estimated cost per lin. ft., $1.25; Lateral sewer No. 2206, in alley in block bounded by Railroad Ave., Harbaugh Ave., north of Cedar St., estimated cost per lin ft., $1.80; Lateral sewer No. 2208, in alley in block bounded by Stone, Dearborn and Woodmere Sts., estimated cost per lin. ft., $1.40; Lateral sewer No. 2210, in alley in block bounded by Stephens, Chippewa, Mack and Sylvester Sts., estimated cost per lin. ft., $1.50; Lateral sewer No. 2211, in alley in block bounded by Drexel, Coplin, Jefferson and Kercheval Aves., estimated cost per lin. ft., $1.50; Lateral sewer No. 2212, in alleys in block bounded by Iroquois, Burns, Kercheval and Waterloo Sts., estimated cost per lin. ft., $1.60.

✚*FREEPORT, ILL.—Bids were received as follows by the Board of Local Improvements on April 14 for the construction of two sanitary sewer systems: J. W. TURNER IMPROVEMENT CO., 309 Youngerman Bldg., Des Moines, Iowa, $29,979 (awarded contract); John Grogan, Green Bay, Wis., $31,558; Gund Graham Co., Freeport, Ill., $31,599; Kenety & Lee, Dubuque, Iowa, $31,587; A. C. Schielter, Monnotowa, Wis., $31,655; Keys & McNamara, Dubuque, Iowa, $32,298; M. C. Camery, Harlan, Iowa, $34,228. East Freeport sewer, F. E. KANISINSKI, Watertown, Wis., $14,967 (awarded contract); J. W. Turner Improvement Co., Des Moines, Iowa, $16,198.

KENOSHA, WIS.—Bids will be received by the Street Assessment Committee until April 21 for the installation of about 925 ft. of 12-in. pipe sewer.

RACINE, WIS.—Bids will be received by the Board of Public Works untid April 29 for constructing a sewer in Forest St. P. H. Connolly is City Engr.

✚SHEBOYGAN, WIS.—The Board of Public Works awarded contracts for sewer construction as follows: Wisconsin Ave., A. VOWINKEL, Sheboygan, at 74 cts. per lin. ft. and $34 for manholes; North Fifth St., HUEBNER & CO., Sheboygan, at 70 cts. per lin. ft. and $37 for manholes; North Fifth St., north of Huron St., A. VOWINKEL, at 69 cts. per lin. ft. and $34 for manholes; South Eighth St., A. VOWINKEL, at 60 cts. per lin. ft and $29 for manholes.

SOUTH MILWAUKEE, WIS.—The following bids were received on April 10 for the construction of sewers and sewage disposal plant: Sewers, A. C. Schreiter, $16,764; Jno. Brogan, $17,975; N. F. Reichert, $20,276; R. J. HICKEY, $14,210 (awarded contract); Jos. Whalen, $16,900; T. Szukalski, $18,579; E. R. Harding, $18,888. Sewage disposal plant, F. R. Harding, $7,405; Jno. Brogan, $6,979; R. J. HICKEY, $6,789 (awarded contract); Edward Petzold, $7,748. John W. Alvord and Charles B. Burdick, Hartford Bldg., Chicago, Ill., are the Engrs.

MANKATO, MIN.—A. H. Scherer, City Clk., will receive bids until April 24 for the installation of a storm sewer.

✚FORT LEAVENWORTH, KAN.—The contract has been awarded to the A. J. TAUSSIG CONSTRUCTION CO., St. Louis, Mo., at $48,928 for the construction of section A and D of an extension to the outfall sewer in Fort Leavenworth, Kan.

CANTON, S. DAK.—Bids will be received by R. G. Valentine, Comr. of Indian Affairs, Washington, D. C., until May 2, for extension to sewer system at the Canton Insane Asylum, Canton.

*FORT D. A. RUSSELL, WYO.—Bids will be received in triplicate, by Capt. F. S. Armstrong until May 8 for construction of approximately the following estimated quantities of drain: 3,125 lin. ft. of 8-in. S. G. vitrified pipe and specials, 2,900 lin. ft. of 6-in. S. G. vitrified pipe and specials and nine manholes.

OTTAWA, ONT.—Bids will be received by Board of Control, until April 27, for the construction of the west end drainage system. N. J. Ker is City Engr.

## GARBAGE DISPOSAL.

WELLESLEY, MASS.—Bids will be received until April 21 by the Board of Health for the collection and disposal of the town garbage for two years from May 1. W. N. Magown is Secy. Bd. of Health.

✚NEW YORK, N. Y.—The KINDLING MACHINERY CO., Louis Kindling, Pres., Milwaukee, has been awarded the contract for furnishing 150 patented Kindling street sprinklers of the squeegee type to the Street Cleaning Department.

NEW YORK, N. Y.—Bids will be received by William A. Edwards, Comr. of St. Cleaning, until noon, May 1, for furnishing and delivering twelve street sweeping machines.

*ERIE, PA.—Bids will be received until 8 p. m., May 8, by the Chairman of the Trust Session of Councils for the construction of an incinerator plant. B. E. Briggs is City Engr.

✚BENWOOD, W. VA.—The City Council, it is reported has awarded the contract to the DIXON ENGINEERING CO., of Toledo, Ohio, for a crematory of 12 tons daily capacity at about $8,000.

## STREETS AND ROADS.

*(*Denotes that this work is advertised in Engineering News.)*

✚BOSTON, MASS.—We are officially advised that the contract for repairing artificial stone sidewalks in any street within the city limits has been awarded to C. W. DOLLOFF & CO. Noted on March 30.

BOSTON, MASS.—It has been announced that the New York, New Haven & Hartford R. R. Co. will contribute $12,500 of the $71,000 estimated as the cost of paving Southampton St. and Rogers Ave. The remainder will be paid by the city. Louis K. Rourke is City Engr. and Supt. Paving.

BOSTON, MASS.—Bids will be received until April 26 for paving 4,000 sq. yds. in Haverhill St. Louis K. Rourke is Comr. of Pub. Wks.

BOSTON, MASS.—Bids will be received until April 25 for constructing a tar-macadam roadway and artificial stone sidewalks in Corey Road, Brighton District, and Hazleton St., Dorchester District. Louis K. Rourke is Comr. Pub. Wks.

✚BOSTON, MASS.—The following bids were received on April 12 for constructing 8,000 ft. of macadam road in Granby, extending the 1908 highway toward Belchertown, awarded to C. E. HORNE, Millbury, Mass., at $8,322. Other bidders were: R. F. Hudson, Wilmington, Mass., $8,458; Lane Construction Corporation, Meriden, Conn., $8,768; F. J. Mague, West Newton, $8,791; F. E. Ellis, Melrose, $8,793, and Michael L. Carmarco, Lee, $8,865; for building 4,300 ft. of oil macadam road in Tyngsboro, northwesterly from the section built in 1910, to H. W. TARBELL, $7,006. Other bidders were: Frank Williams, $5,494; F. E. Ellis, Melrose, $7,257; F. J. Mague, West Newton, $7,402; R. F. Hudson, Wilmington, $7,461, and Martin & Condon, Watertown, $7,975.

✚BOSTON, MASS.—The following bids were received on April 10 for building a macadam roadway in Greenwood St., Dorchester District: J. C. COLEMAN & SONS CO., $13,261 (awarded contract); Connolly & Diamond, $13,501 with local stone, and $13,770 with trap rock; James Doherty, $13,859 and $13,904; William J. Rafferty Co., $14,116 and $14,205; John F. O'Connell, $14,369 and $14,548; D. M. Biggs & Co., $15,510 and $15,954; John McCourt & Co., $13,756 and $13,801; John Kelly & Co., $13,651 and $13,987; Daniel E. Lynch, $16,788 and $17,236. Noted on April 6.

PROVIDENCE, R. I.—A plan has been proposed to Henry Fletcher, Mayor of Providence, providing for the construction of a new street, 100 ft. wide, from the post-office to Angell and Brown Sts.

HARTFORD, CONN.—Bids for the relaying of asphalt pavement and concrete base, 4,000 sq. yds. on Farmington Ave., 4,300 sq. yds. on Sheldon St., 3,000 sq. yds. on Main St., 4,000 sq. yds. on High St., and 6,800 sq. yds. on Capitol Ave. were received on April 10 by the Board of Contract & Supply, as follows: (a) Surface asphalt per sq. yd., (b) binder per sq. yd., (c) concrete per cu. yd., (d) expense and handling per sq. yd.: Warren Bros., Boston, Mass., Sheldon St., (a) $1.57, (b) $10, (c) $4, (d) 55 cts.; High St., (a) $1.62, (b) $10; Main St., (a) $1.62, (b) $10; Capitol Ave., (a) $1.62, (b) $10; Farmington Ave., (a) $1.57, (b) $10, (c) $4, (d) 55 cts. Narragansett Improvement Co., Boston, Mass., (a) $1.67, (b) $15, (c) $6.12 for all streets. Southern New England Paving Co., Hartford, Conn., Sheldon St., (a) $1.31, (b) $9, (c) $5.35; High, Main and Capitol Ave., (a) $1.27, (b) $9; Farmington Ave., (a) $1.35, (b) $9; (c) $5.65, (d) 75 cts. Noted on April 6.

NEW YORK, N. Y.—Bids will be received by Charles B. Stover, Pres. Park Board, until 3 p. m., April 27, for furnishing all the labor and materials required for reconstructing and surfacing with asphaltic earth mixture, The Bronx and Pelham Parkway, from the Southern Boulevard to the Butler St. road, in the Borough of The Bronx. Blank forms may be obtained at the office of the Department of Parks, Zbrowski Mansion, Claremont Park, Borough of The Bronx.

NEW YORK, N. Y.—Bids were received on April 12 by Alfred E. Steers, Pres. Boro. of Brooklyn, as follows: Regulating and

paving with asphalt on a concrete foundation, the roadway of 52d St., from 13th to 16th Aves., Barber Asphalt Paving Co., $12,572; Brooklyn Alcatraz Asphalt Co., $11,138; Cranford Co., $11,175; Uvalde Contracting Co., $11,462.

Regulating, grading, curbing and laying sidewalks on Eighth Ave., from 62d St. to Bay Ridge Ave., M. J. O'Hara, $15,821; J. J. Schneider, $15,018; Napola Caponi, $21,077; Seaboard Construction Co., $19,657; Chas. J. Vofri, $14,685; P. S. Hickey, $12,003; McCauley & Manton Co., Inc., $14,896.

Regulating and paving with asphalt on a concrete foundation the roadway of Caton Ave., from Coney Island Ave. to Marlboro Road, Barber Asphalt Paving Co., $12,160; Brooklyn Alcatraz Asphalt Co., $10,467; Uvalde Contracting Co., $12,278; Cranford Co., $10,714.

Regulating, grading, curbing and laying sidewalks on 68th St., from Fourth to Fort Hamilton Aves., W. W. Gorman, $19,885; J. J. Schneider, $17,239; Charles J. Vofri, $16,130; P. S. Hickey, $17,566; Seaboard Construction Co., $23,265; McCauley & Manton, $18,867.

FORT H. G. WRIGHT (New London, Conn., post-office), N. Y.—Bids will be received by Capt. F. T. Arnold, Constr. Q. M., U. S. A., New London, Conn., until May 2 for the construction of about 5,700 sq. yds. of macadam roads and about 13,200 sq. ft. of cement walks.

ITHACA, N. Y.—The Board of Supervisors of Tompkins County have voted to construct the Freeville-Groton Road, 4.49 miles long, at an estimated cost of $51,200. F. C. Evans is Supt.

TROY, N. Y.—Bids will be received by the Board of Contract and Supply, James M. Riley, Secy., until 11 a. m., April 25, for paving, curbing, grading and regulating Fourth St., from Fulton to Grand St.

NEW ROCHELLE, N. Y.—Bids will be received by the Board of Public Works, Richard Lathers, Jr., Chn., until May 4, for paving with macadam and constructing curb, gutter and flag and concrete sidewalks on various streets.

*LACKAWANNA, N. Y.—Bids will be received by the Common Council until 8 p. m., May 15, for paving the Ridge Road, from South Park Ave. to Hamburg Turnpike, with vitrified brick, the pavement to be 42 ft. in width from curb to curb, according to the plans and specifications on file in the office of John J. Monaghan, City Clk.

NEW YORK, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., April 26, for regulating, grading, paving, constructing sidewalks, etc., on portions of various streets.

*POUGHKEEPSIE, N. Y.—Bids will be received for constructing concrete sidewalks and concrete curbs, until 4 p. m., April 27, at the office of the Board of Public Works, R. J. Harding, Supt.

✚WASHINGTON, N. J.—We are officially advised that the contract for macadamizing Washington, Asbury and Imlaydale roads, a total of 6½ miles, was awarded on April 17 to SALMON BROS., Netcong, N. J., at $49,307. The other bidders were: M. Irving, Demarest, Sewaren, $57,067; Jas. J. Allen, Netcong, $77,992; John Ed. Foley, Paterson, $81,796. Noted on April 6.

NEWARK, N. J.—We are officially advised that the lowest bids received on April 13 for laying about 116,980 sq. yds. of brick pavement were: Ogden St., granite, Jersey Paving Corp., $18,346; Malvern St., granite, J. F. Shanley Co., $47,247; Delancy St., granite, J. F. Shanley Co., $42,041; Tyler St., granite, J. F. Shanley Co., $34,791; South 17th St., brick, Newark Paving Co., $40,717; Vincent St., brick, Jersey Paving Corp., $9,762; Bigelow St., brick, McMahon Construction Co., $7,961; South 14th St., brick, Van Keuren & Son., $36,830; 14th Ave., brick, Newark Paving Co., $23,224; Clifton Ave., bitulithic, Standard Bitulithic Co., $15,039; Madison Ave., bitulithic, Standard Bitulithic Co., $30,813; Mapes Ave., bitulithic, Standard Bitulithic Co., $13,500; Sherman Ave., bitulithic, Standard Bitulithic Co., $31,938. Bids for the above streets were received under Chapter 217, Laws of 1895, which provides that the contract for these streets, if awarded, will be awarded provisionally, subject to being rejected if a majority of the property owners on the street object to its being paved. Noted on April 6.

NEWARK, N. J.—Bids will be received by the Board of Street and Water Commissioners until 3.15 p. m., April 27, for paving portions of several streets with brick and granite on a 6-in. concrete foundation.

JERSEY CITY, N. J.—Bids will be received by the Board of Street and Water Commissioners until 2 p. m., April 24, for improving Centre St., from Bright to York St. The work will include: 740 cu. yds. of earth excavation; 10 cu. yds. of earth filling; 60 cu. yds. of sand filling; 145 sq. yds. of paving (Belgian) in gutters; 500 lin. ft. of curbstone, 5 x 16-in., set in concrete; 240 sq. ft. of bridgestone; 1,900 sq. ft. of flagging; 2 reset receiving basin heads.

✚PHILADELPHIA, PA.—A contract for constructing 14,000 sq. yds. of asphalt pavement and 1,700 sq. yds. of granite block pavement on Spring Garden St., from Broad to 25th St., has been awarded to the BARBER ASPHALT PAVING CO., Land Title Bldg., Philadelphia, at 93 cts. per sq. yd. The Filbert Paving & Construction Co., Pennsylvania Bldg., Philadelphia, submitted a bid of $1.08 per sq. yd. The estimated cost of the work is $15,000.

PITTSBURG, PA.—Bids will be received by Joseph G. Armstrong, Dir. Pub. Wks., until April 24 for grading, curbing and paving West Carson and Chartiers Aves. The work will include 23,650 sq. yds. blockstone pavement, 18,800 sq. ft. granolithic sidewalk, 292,000 lbs. steel reinforcement, 7,250 lin. ft. structural steel fence, 3,700 lin. ft. concrete piles, 4,620 lin. ft. 15-in. terra cotta sewers; grading, curbing and paving, with blockstone, Class D, Sidney, South 21st and South 23d Sts.; standard sheet asphalt, Coleman St. and Wellesley Ave.; repressed vitrified brick, Class A, Wren Alley and Excelsior St.; repaving with creosoted wood blocks, the roadway of Aiken Ave. Bridge; also constructing reinforced-concrete sidewalks on South Tenth St. Bridge.

WASHINGTON, PA.—Bids will be received by John H. Moffitt, County Controller, until noon, April 27, for furnishing vitrified paving brick or block as follows: 17,600 sq. yds. of paving on the Charleroi-Bentleyville road, and 5,900 sq. yds. of paving on the McDonald-Venice road; about 11,700 sq. yds. of paving on the Prosperity-Dunn's Station road. Chaney & Armstrong are Engrs. of Washington County.

WILMINGTON, DEL.—We are officially advised that bids will be asked in about two months for constructing the road to be built by T. Coleman du Pont, of Wilmington. The road will extend through the entire length of Delaware, and will cost approximately $2,000,000. Noted on March 9.

✚BALTIMORE, MD.—Contracts for paving were awarded on April 12, as follows: To WILLIAM M. ELDER, 220 St. Paul St., Baltimore: Edmondson Ave., from the Philadelphia, Baltimore & Washington tracks to Fulton St., with sheet asphalt, $19,052; Fulton Ave., from Wilkens to Frederick Ave., with vitrified blocks, $18,488; Mulberry St., Payson to Pulaski, sheet asphalt, $2,467; Carrollton Ave., Lanvale to Harlem, sheet asphalt, $3,693; Oliver St., Caroline to Broadway, asphalt, $8,708; High St., Fayette to Lexington, asphalt, $3,696; Aisquith St., Ashland to Chase, sheet asphalt, $8,488; Hollins St., Garrison Ave. to Catherine St., vitrified blocks, $6,261; Fremont St., Baltimore to Pratt, granite, blocks, $19,567; Barre St., Light to Charles, granite blocks, $6,856; Lombard St., Hopkins Pl. to Hanover, granite blocks, $7,238. To MARTIN J. BEACH, American Bldg., Baltimore, north side of O'Donnell St., Kenwood Ave. to Ellwood, vitrified blocks, $13,498; Luzerne St., Federal St. to the Baltimore Cemetery, vitrified blocks, $2,562. To the FILBERT PAVING & CONSTRUCTION CO., Charles and Lexington Sts., Baltimore, Courtland St., Hamilton to Centre, vitrified blocks, $1,618; Hargrove alley, Hamilton to Centre, vitrified blocks, $1,032.

✚BALTIMORE, MD.—The contract for paving Gough St. and Highland Ave. has been awarded to the GEORGE LONG CONTRACTING CO., First St. and First Ave., at $4,812 and $17,033, respectively. Other bids were as follows: F. E. Schneider, $5,261 and $18,721; P. Reddington & Sons, $5,146 and $17,385; Hines & Hayman, $5,438 and $18,494; D. M. Andrew Co., $5,127 and $18,256.

✚CAMBRIDGE, MD.—We are officially advised that the contract for improving streets at Cambridge, using Mack block, has been awarded to FIELD, BARKER & UNDERWOOD, Arcade Bldg., Philadelphia, Pa., at $47,208. The other bidders were: Ambler Davis Co., Harrison Bldg., Philadelphia, $51,027; Martin J. Beach, American Bldg., Baltimore, Md., $56,073; W. M. Elder, Low Bldg., Baltimore, $49,774; David M. Andrews, 26th St. and Mt. Vernon Ave., Baltimore, $45,996; United Paving Co., Bartlett Bldg., Atlantic City, N. J., $52,620; Thomas S. Holt, Federalsburg, Md. (bidding on curb and gutter only), $7,370; Rock Paving Co., Easton, Md., $10,430.

WASHINGTON, D. C.—Bids will be received until 2 p. m., May 6, by the Commissioners of the District of Columbia for furnishing sheet asphalt for use on the streets and roads of the District during the fiscal year ending June 30, 1912.

ABINGDON, VA.—The Street Committee of Bristol District and the Road Commissioners and Supervisors of Goodson District of Washington County, Abingdon, have agreed upon grading and macadamizing the four principal roads leading out of the city as follows: On road to Green Spring, $11,500; Wallace Road, $9,500; Mumpower Road, $7,500; Three Spring Road, $7,500. Total, $36,000.

NORFOLK, VA.—The Board of Control has recommended the paving of Fairfax Ave., Dundaff St. and Pembroke Ave., at a cost of $15,842. W. T. Brooke is City Engr.

✚PORTSMOUTH, VA.—The Seventh Ward Local Board of Improvement, D. F. Appenzeller, Chn., has awarded a contract to E. PARK LINDSAY, Portsmouth, at $14,260, for improving South St. The work will include grading, brick pavement on sand base, 2,000 lin. ft. of 5-in. granite curbing and 5,600 sq. yds. of Tarvia macadam roadway on 8-in. base.

ROANOKE, VA.—Bids will be received by W. L. Craft, City Clk., until April 20, for constructing granolithic sidewalks, macadamizing, guttering and curbing Henry St. F. L. Gibboney is City Engr.

*JACKSONVILLE, FLA.—Bids will be received by the Board of County Commissioners of Duval County until 10 a. m., May 3, for resurfacing with asphalt-macadam the Turner road, from Main St. to McLain Ave.; and for paving the same with No. 2 vitrified brick, laid flat. Specifications and other data can be had upon application to Gail L. Barnard, County Engr., Room 9, Court House, Jacksonville.

✚MOBILE, ALA.—Bids for paving Water St. have been received as follows: Sullivan & Long, Bessemer, Ala., $31,790; Alabama Paving Co., Birmingham, Ala., $32,648; JAMMISON & HALOWELL, Montgomery, Ala. (awarded contract), $31,457; Graves-Shale Paving Co., Birmingham, $32,471.

COLUMBUS, MISS.—Bids will be received by E. S. Donnell, Mayor, until noon, May 2, for constructing 6,000 lin. ft. of concrete curb and gutter or granite curb and concrete gutter, according to plans and specifications on file in the office of the Mayor.

*GRENADA, MISS.—Bids will be received by L. B. James, City Recorder, until May 1, for constructing from 75,000 to 150,000 ft. of granolithic sidewalks.

✚MERIDIAN, MISS.—We are officially advised that the contract for improving Marion, Poplar Springs, Arundal Springs and Causeyville Roads has been awarded to the HEALEY CONSTRUCTION CO., at $50,000. Noted on March 23.

✚FRANKLINTON, LA.—A contract has been awarded to J. S. MOODY for building one mile of road on the route of the $5,000 road.

KNOXVILLE, TENN.—Bids will be received by the Mayor and Aldermen of Knoxville at the office of W. P. Chandler, City Recorder, until noon, April 21, for the construction of paving, curbing, guttering and grading, etc., as required by the plans and specifications on file in the office of the City Recorder.

MAYSVILLE, KY.—Bids will be received by the City Clerk until April 24 for paving various streets with Tarvia on macadam base.

CATLETTSBURG, KY.—Bids will be received by the City Council until 6 p. m., May 15, for improving portions of various streets. The work will consist of 14,555 lin. ft. of curb and gutter, 20,305 sq. yds. paving. H. Chatfield is City Clk.

✚CLEVELAND, OHIO.—We are officially advised that the contract for constructing Wooster Pike No. 3 was awarded, on April 15, to BALDWIN BROS., Rose Bldg., Cleveland, at $30,105. The other bidders were: Gould & Maybach, $31,365; Enterprise Paving & Construction Co., $31,166; Cleveland Trinidad Paving Co., $34,869. Noted on March 23.

ELYRIA, OHIO.—We are officially advised that all bids received on April 10 for constructing brick pavements were rejected. New bids will be received until May 8. R. Moriarty is City Clk. Noted on April 6.

MARYSVILLE, OHIO.—Bids will be received by the Board of County Commissioners until May 10 for the improvement of 1½ miles of the Davis Road in Union County.

MONTPELIER, OHIO.—Bids were opened on April 10, for paving Main and Empire Sts., as follows: Hennessy Bros., Piqua, Ohio, Main St., $57,214; Empire St., $58,169. H. Enck, Lima, Ohio, $57,782 and $59,215. K. Neal & Ryan, Lansing, Mich., $57,971 and $59,449; Moelring Construction Co., Fort Wayne, Ind., $60,860 and $62,301. Fishball & Karschnar, Celina, Ohio, $56,975 and $60,843. Heffner & Son, Celina, Ohio, $56,357 and $58,029. If local gravel is accepted, Main St., $51,581; Empire St., $53,252. Lynn & Burke, Paulding, Ohio, $54,841 and $56,274. Carpenter & Anderson, Grand Rapids, Mich., with Gilsonite, $55,351. Freshwater & Sons, Celina, Ohio, $56,203 and $58,592. Cleveland Trinidad Asphalt Co., with Lake asphalt, $62,528. S. S. Saxton, Richmond, Ind., Trinidad or California asphalt, $54,726. Andrews Asphalt Co., Hamilton, Ohio, with Pitch Lake asphalt, $57,277. Asphalt Block Co., Toledo, Ohio, $56,997.

BELLEFONTAINE, OHIO.—Resolutions have been passed providing for the construction of seven miles of sidewalk. L. E. Pettitt is Mayor.

CINCINNATI, OHIO.—Bids will be received by the Board of Public Service, John J. Wenner, Clk., until April 21, for improving Dirheim and Ratterman Aves. by grading, curbing and paving with brick; also paving with brick and macadam Wellington Pl.

Bids will be received by the Director of Public Service, John J. Wenner, Clk., until April 25, for furnishing the necessary labor and materials for the improvement of Lincher Ave., from Ratterman Ave. to right-of-way of Cincinnati & Westwood R. R., by grading, setting cement combined curb and gutters, paving the roadway with brick and constructing the necessary drains and inlets. Plans, specifications and blank proposals can be obtained at the office of the Chief Engineer of the Department of Public Service.

CLEVELAND, OHIO.—Bids will be received at the office of the Board of Commissioners of Cuyahoga County, John F. Goldenbogen, Clk., until 11 a. m., May 3, for grading and improving Harvard Road, between stations 11 and 16, in accordance with the form of contract and specifications to be furnished by Frank R. Lander, County Surv.

DAYTON, OHIO.—Bids will be received by the Board of County Commissioners, J. O. Donovan, Clk., for grading and improving the Cincinnati Pike, from West Carrollton to Miamisburg, Miami Township.

RAVENNA, OHIO.—Bids will be received by W. J. Dodge, County Audr., until May 1, for grading and paving with brick 2.12 miles of road in Ravenna and Shalersville Townships.

✚STEUBENVILLE, OHIO.—We are officially advised that the contract for paving, grading and curbing portions of Wilson Ave., Wells and Slack Sts. was awarded, on April 10, to JOHN O. BATES, at $6,257. Noted on April 6.

✚YOUNGSTOWN, OHIO.—Contracts for paving have been awarded as follows: Logan Ave., to S. H. DEGROODT, at $35,766; Oak St., to ANTHONY O'HORO, at $2,441; Superior St., to A. COLLUCCI, at $12,658; Breaden St., to MULLIN & QUINN, at $10,522; Duquesne St., to YOUNGSTOWN CONSTRUCTION CO., at $5,411.

Bids will be received by the Commissioners of Road District No. 1, Frank Agnew, Secy., until April 24, for improving by slag and limestone macadam the Snyder Road, Austintown Township, 8,133 ft. long; Town Line Road, Youngstown and Austintown Townships, 5,440 ft.; and Glenwood Ave. extension, Sec. No. 21, in Youngstown Township, 3,820 ft.

ASHTABULA, OHIO.—The City Council has adopted a resolution to construct a road to the shipyards at a cost of about $10,000. Resolutions have also been adopted to build sidewalks on Bridge, Topper and Columbus Sts.

BARNESVILLE, OHIO.—Bids will be received until May 8 for paving Lincoln St. F. Waldo Hilles is City Clk.

BOWLING GREEN, OHIO.—Bids will be received by the Board of Commissioners of Wood County until May 9 for the improvement of the A. A. Ham Stone Road, the Chas. Kapp Stone Road, [illegible] Stone Road, the A. W. [illegible] and the J. H. Baird St[illegible] A. A. Hiser [illegible] Stone Road. [illegible] Road. [illegible]

✚CALDWELL, OHIO.—[illegible] improvement of the coun[illegible] awarded to NIXON & JUN[illegible] Ohio, at $10,302.

MILLERSBURG, OHIO [illegible] ceived the latter part o[illegible] 6,000 sq. yds. of streets.

LOGANSPORT, IND.—[illegible] North St. have been rece[illegible] of Public Works, as follo[illegible] man, Rochester, Ind., bri[illegible] block, $72,302. Joseph H[illegible] Ill., asphalt, $61,793; G[illegible] Logansport, brick, $65,041; [illegible] Richmond, Ind., asphalt, S[illegible] Asphalt Co., Hamilton, Oh[illegible] 450; Fred Hoffman, Roche[illegible] $61,510. William Pickett is [illegible]

✚LOGANSPORT, IND.—T[illegible] constructing the Henry Myer [illegible] Township has been awar[illegible] GROVER at $9,835. Noted [illegible]

BLOOMFIELD, IND.—Bids [illegible] by the Commissioners of Gre[illegible] til 2 p. m., May 2, for the co[illegible] macadamized road in Tay[illegible] known as the Asdell Road. [illegible] nings is County Audr.

BRAZIL, IND.—Bids will [illegible] the Commissioners of Clay [illegible] 11.30 a. m., May 5, for the [illegible] 2,670 ft. of gravel road in Va[illegible] ship, and 5,298 ft. gravel road [illegible] son Township. Edgar Staggs is [illegible]

BROOKVILLE, IND.—Bids wi[illegible] by the Commissioners of Fra[illegible] until 1 p. m., May 9, for the co[illegible] a gravel road in Springfield To[illegible] a gravel road in Bath and Spri[illegible] ships. Charles A. Miller is Coun[illegible]

CROWN POINT, IND.—Bids [illegible] ceived by the Commissioners of Lake County until 10 a. m., May 5, for the construction of the following gravel roads: I. W. Englehart Road No. 1 in Calumet Township; I. W. Englehart Road No. 2 in Calumet Township; I. W. Englehart Road No. 3 in Calumet Township; William E. Va[illegible] Road in North Township; D. J. Paskwicz Road in North Township; and the W. P. Van Horn Road in North Township. Charles A. Johnson is County Audr.

GREENCASTLE, IND.—Bids will be received by D. V. Moffett, Audr. Putnam County, until noon, May 1, for the construction of 13,333 ft. of macadam road, known as the Boswell Road, in Madison Township.

LOGANSPORT, IND.—Bids will be received by the Commissioners of Cass County until 10 a. m., May 2, for the construction of the Galloway and the Gipson gravel roads and others in Jefferson Township. John E. Wallace is County Audr.

ROCKVILLE, IND.—Bids will be received by the Commissioners of Parke County until 1.30 p. m., May 3, for the construction of the Turkey Run gravel road in Howard Township. James E. Elder is County Audr.

TERRE HAUTE, IND.—Bids will be received by the Commissioners of Vigo County until 11 a. m., April 29, for the construction of the following gravel roads: The Strole Road, 3,830 ft.; the Whitesell Road, 3,880 ft.; the Philip Long Road, 5,771 ft.; all in Fayette Township, and the Brown Meyer Road No. 2, in Riley Township. Nathan G. Wallace is County Audr.

✚MARION, IND.—The contract for reconstructing the Thomas Baird Road has been awarded by the County Commissioners to RYAN & CARROLL, Jonesboro, Ind., at $7,435.

Ryan & Carroll, Jonesboro, and Harvey B. Sisk, Bluffton, Ind., each submitted a bid of $31,000 for constructing the Earl Plough Road.

RUSHVILLE, IND.—Bids will be received by the Joint Board of Commissioners of the Counties of Hancock, Shelby and Rush at Rushville, until May 13, for constructing a gravel road 36,830 ft. long, on the line between the counties.

VALPARAISO, IND.—The taxpayers of Pleasant Township have voted to construct 16 miles of gravel road to cost about $77,000.

WILLIAMSPORT, IND.—Bids will be received by the Board of Commissioners of Warren County until 1 p. m., May 1, for constructing a gravel road in Kent Township. David H. Moffit is County Audr.

*CHARLEVOIX, MICH.—Bids will be received by E. J. Hiller, City Clk., until May 2 for paving Michigan Ave., 42 ft. wide, covering about 600 lin. ft., and for paving Dixon Ave., from Michigan Ave. to the P. M. right-of-way, 32 ft. wide, a distance of about 4,600 ft.

✚OAK PARK, ILL.—We are officially advised that the contract for constructing 7,480 sq. yds. of asphaltic concrete pavement and 3,990 lin. ft. of granite concrete combined curb and gutter on Linden Ave., between Chicago Ave. and Augusta St., and on Iowa St., between Oak Park and East Aves., was awarded on April 11 to the STANDARD PAVING CO., 145 La Salle St., Ill. Noted on April 6.

✚PEORIA, ILL.—The contract for paving Perry Ave., from Jackson to Cornhill St., has been awarded to J. W. BUSHELL, the only bidder, at $25,714.

KENOSHA, WIS.—Bids will be received by the Street Assessment Committee, at the office of the City Engineer, until 2 p. m., April 21, for the improvement of Elizabeth St., from Ashland Ave. to right-of-way of the C. & M. Electric Ry. Co., approximately 17,643 sq. yds. of pavement, and 11,200 lin. ft. of stone curbing. M. J. Scholey is Chmn. Com.

MILWAUKEE, WIS.—The Janesville plank road will be widened between Layton Park and Hales Corners from 66 to 150 ft. The work will be done by the State Highway Commission, and is estimated to cost $16,000.

✚PLATTEVILLE, WIS.—We are officially advised that bids for constructing 8,880 sq. yds. of paving were received on April 13, as follows: Thomas W. Quinn, $1.82 per sq. yd. for brick; total bid, $19,030; Thomas E. Woolley, reinforced concrete, $1.39 per sq. yd., total $14,534; asphalt macadam, $1.82 per sq. yd., total, $18,153; sarcolithic, $1.82 per sq. yd., total $18,153. The contract will be awarded on April 25. J. E. Kennedy is City Clk. Noted on April 13.

✚APPLETON, WIS.—The Common Council has awarded contracts for paving as follows: Sheet asphalt on Oneida, Pacific and Bruecke Sts., to [illegible] HILL, Appleton, Wis., at $3.769 per lin. ft.; concrete on Sixth St., to AUGUST NUEPPEL, Appleton, Wis., at $2.413 per lin. ft. Total amount of contracts, $5,000.

✚MONROE, WIS.—The Common Council has awarded contract for paving Jefferson St. with paver block, vitrified brick and cement filler, to T. W. QUINN, Madison, Wis., at $1.79 per sq. yd.

✚CRESCO, IOWA.—We are officially advised that bids for constructing 5,500 lin. ft. of cement concrete curbing, and 11,500 sq. yds. of cement concrete paving were received on April 10, as follows: CONCRETE CONSTRUCTION CO., Cedar Rapids, Iowa, curbing, 28 cts. per lin. ft., paving $1.358 per sq. yd. (awarded contract for paving); Fraser & Daufault, Rochester, Minn., 28 cts. and $1.44; Dearborn & Jackson, Cedar Rapids, 20 cts. and $1.495; St. James Tile Mfg. Co., St. James, Minn., 34 cts. and $1.42; C. B. McNamara Co., Dubuque, Iowa, 49 cts. and $1.44; Kenoty & Co., Dubuque, 30 cts. and $1.48; DECORAH CEMENT SIDEWALK CO., Decorah, Iowa., 23 cts. (awarded contract for curbing), and $1.43. Noted on March 23.

✚CENTERVILLE, IOWA.—Contracts for brick and concrete paving have been awarded to BEEBE BROS., Omaha, Neb., at $1.49 per sq. yd. for concrete paving, $1.925 per sq. yd. for brick paving, and 38 cts. per lin. ft. for cement curbing. Aggregate amount, $12,364.

FULTON, MO.—Bids will be received by the City Council until May 4 for constructing 9,000 sq. yds. of brick pavement on a 5-in. concrete base, 12,000 sq. yds. of macadam pavement with binder, and 10,000 lin. ft. of concrete curb. P. D. Thurmond is City Engr., and W. R. Pemberton City Clk.

GALVESTON, TEX.—Bids will be received by John M. Murch, County Audr., until April 24 for paving Galveston County highway, from Broadway and the city limits to the causeway.

✚LAWTON, OKLA.—We are officially advised that the contract for constructing five miles of street pavements was awarded, on April 10, to the C. H. SHAW CONSTRUCTION CO., of Lawton, at $156,318. The other bidders were: Mayfield, Shaw & Redman, Lawton, $158,295; E. R. Kerby, Lawton, $165,180; Charles L. Derr, Oklahoma City, Okla., $173,643. Noted on March 23.

PHOENIX, ARIZ.—Bids will be called for in about one month for constructing portions of the territorial highways. J. B. Girard is Territorial Engr.

✚SEATTLE, WASH.—The contract for paving Sixth Ave. with asphalt has been awarded to the BARBER ASPHALT PAVING CO. at $30,990.

✚The contract for paving McClellan St. has been awarded to the INDEPENDENT ASPHALT PAVING CO. at $27,992.

✚CENTRALIA, WASH.—We are officially advised that the contract for grading and constructing hard-surface pavements was awarded, on April 4, to the LISTER CONSTRUCTION CO., Tacoma, Wash., at $56,242. Noted on March 23.

PORTLAND, ORE.—We are officially advised that the city of Portland has 66 miles of hard surface pavement under contract, and 34 miles estimated. The total cost of the improvement is estimated at $5,280,000. J. W. Morris is City Engr.

✚LONG BEACH, CAL.—The Board of Public Works opened bids on April 5, for constructing a combined bulkhead and sidewalk with parpet of reinforced cement concrete on Seaside Boulevard, from Chestnut Pl. to the jetties at ocean channel entrance, as follows: J. C. Beer, $130,000 and $122,947; A. S. Bent, $140,000; J. W. Young, $121,499; J. D. KNEEN CONTRACTING CO., $110,985 (awarded contract).

✚LOS ANGELES, CAL.—Contracts have been awarded by the Board of Public Works, as follows: For improving Commercial St., from Alameda St. to the Los Angeles River, to WITHERS & CRITES at $21,717; for improving Jefferson St., from Vermont Ave. to Western Ave., to the FAIRCHILD-GILMORE-WILTON CO., at $31,003.

SACRAMENTO, CAL.—An appropriation of $15,000 has been made for improving the Lake Tahoe wagon road. Nathaniel Ellery, Sacramento, is State Engr.

STOCKTON, CAL.—The Board of County Supervisors have awarded contracts as follows: To A. B. MUNSON & SON for improving the Waterloo road for the distance of 1½ miles at $14,167; to COTTON BROS., for improving Cherokee Lane, at $47,784.

SAN LUIS OBISPO, CAL.—We are officially advised that the only bid received on April 10 for paving Osos St., was submitted by the City Street Improvement Co., at $40,377, was rejected. New bids will be received until May 1. Noted on April 6.

✚SASKATOON, SASK.—The WESTERN PAVERS, LIMITED, Winnipeg, Man., has been awarded the contract for constructing cement sidewalks at their bid of $90,000.

COQUITLAM, B. C.—The ratepayers on April 5 carried bylaws appropriating $150,000 for new roads and $50,000 for new sidewalks.

VICTORIA, B. C.—Bids will be received by William Northcott, Purchasing Agt., until 4 p. m., April 28, for paving with asphalt approximately 40 miles of street. Plans and specifications may be obtained at the office of Angus Smith, City Engr.

## MANUFACTURING PLANTS.

*(✚Denotes a contract awarded.)*

✚FALL RIVER, MASS.—According to reports, the Directors of the new Standard Fabric Co. have awarded the contract for the construction of their mill to BEATTIE & WILCOX. The mill, which will be erected from the plans of Edward I. Marvell, will be on Portland St., near the American Thread Co. It will be of brick, three stories high and will be 92 ft. wide and a trifle less than 200 ft. long. The new corporation has a capital of $150,000, and will make narrow fabrics. Dr. John Gilbert is Pres. and Edwin V. Livesey, formerly Supt. of the Heywood Narrow Fabric Co., Gen. Mgr.

WAKEFIELD, MASS.—The Harvard Knitting Mills Co. has purchased three lots of land at Maple and Lake Sts., comprising 14,000 sq. ft. on which will be erected a 3-story mill building, 180 × 90 ft., of brick construction.

PROVIDENCE, R. I.—The Brown & Sharpe Mfg. Co. is to build a 7-story addition to its plant.

✚WOONSOCKET, R. I.—A contract has been awarded by the Dunn Worsted Mills Corporation to the EASTERN CONSTRUCTION CO., of Woonsocket, for the erection of a 1-story brick saw-tooth roof weave shed, 80 × 322 ft.

NEW HAVEN, CONN.—The Celluloid Starch Co., of this city, is about to add to its Winchester Ave. factories a 3-story building, of brick, 40 × 60 ft.

✚NEW BRITAIN, CONN.—The MACARTHUR CONCRETE PILE & FOUNDATION CO., 11 Pine St., New York, has been awarded the contract for the concrete pile foundations and the B. H. HIBBARD CO., of New Britain, the general contract for the 7-story factory and office building of Landers, Frary & Clark at Center and East Main Sts. The building will be of brick, 50 × 360 ft. Unkelbach & Perry, of New Britain, are the Archs. Noted March 9 and April 6.

✚NEW HAVEN, CONN.—The contract for an addition to the plant of the L. L. Gilbert Banking Co. on Goffe St. has been awarded to the GEORGE M. GRANT CO. The plans are by Bartberger, Cooley & Bartberger, Archs., Westinghouse Bldg., Pittsburg, Pa., and call for a 2-story brick building, 75 × 64 ft.

BATAVIA, N. Y.—The Johnston Harvester Co., which is now an auxiliary of the Massey-Harris Co., of Toronto, manufacturers of farm machinery, contemplates the enlargement of its malleable iron plant by the erection this summer of two buildings, each approximately 70 × 500 ft. Plans are in progress.

BUFFALO, N. Y.—Robert J. Reidpath & Son, Archs., Builders Exchange, is preparing plans for a 3-story factory building, 70 × 350 ft., to be erected on Elmwood Ave. for the Lippard-Stewart Motor Truck Co. Thomas R. Lippard, Ellicott Square Bldg., is Pres.

ROCHESTER, N. Y.—Gordon & Madden, Archs., Sibley Block, are completing plans for a 3-story and basement factory building, 126 × 192 ft., for the Hickey-Freeman Co., wholesale clothiers, 190 St. Paul St. Estimated cost, $150,000.

BUFFALO, N. Y.—A 5-story and basement loft and light manufacturing building, 80 × 110 ft., is to be erected at 507 Washington St. by the Niagara Garment Co., I. J. Lande, Pres., from plans prepared by J. R. White, Arch., of Niagara Falls. It will be of brick and structural iron construction with concrete floors.

✚BROOKLYN, N. Y.—Official advices are to the effect that the TURNER CONSTRUCTION CO., 11 Broadway, New York, has been awarded the contract for the construction of a 10-story and basement reinforced-concrete factory building for S. Sternau & Co., to be erected at Plymouth and Gold Sts., Brooklyn. The building to be 85 × 122 ft. William Higginson, 13 Park Row, New York, is Arch. Work will go ahead at once.

✚The same company has also been awarded the contract for the construction of an 8-story and basement reinforced-concrete factory building for Thomas & Co., to be erected at Willoughby Ave. and Sanford St., Brooklyn. The building to be 200 × 60 ft. Frank J. Helmle, 190 Montague St., Brooklyn, is Arch. Work to be undertaken at once.

SYRACUSE, N. Y.—The New York State Casting Co., recently incorporated here, will locate its works with the Syracuse Stove Company, whose plant is to be enlarged to provide the necessary manufacturing space required. Francis Kernan, Pres. of the Syracuse Stove Co., is Chn. of the Executive Committee of the new company.

Russell & King, Archs., have completed plans for a 6-story and basement warehouse, 213 × 42 × 91 ft., to be added to the plant of the Syracuse Chilled Plow Co. on Marcellus St. It will be of brick and structural iron. Estimated cost, $40,000. The warehouse will be connected with the main factory by an overhead bridge.

The new Process Stone Co., of this city, is having plans prepared for a manufacturing building, 70 × 118 ft., one story high, which it will erect at Darwin Springs.

UTICA, N. Y.—The Capron Knitting Co. will build a 4-story brick mill, 54 × 168 ft., to be ready for occupancy about Aug. 1, when the company will abandon the present building used for manufacturing and office room and occupy the new mill. The company will also continue its Mill No. 1 at Whitesboro and Liberty Sts. Charles A. Byington, of the Frisbie & Stansfield Co., is Pres.; William C. Plunkett, Gen. Mgr., and J. A. Roberts, Secy. and Treas.

NEWARK, N. J.—Plans have been completed by Edward Dunn, Arch., Firemen's Insurance Bldg., for the construction of a 4-story brick and limestone factory, 67 × 100 ft., on Central Ave., near Seventh St., and bids are being received. Joseph Colyer & Co., carriage builders, 229 Halsey St., are the owners.

CARBONDALE, PA.—A 2-story brick addition is planned to the plant of the Carbondale Knitting Co.

✚NICETOWN (Philadelphia post-office), PA.—The contract to erect a brick addition, one and two stories, to the factory and office buildings of the Link Belt Co. has been awarded to F. A. HAVENS & CO., 845 North 19th St. Cost, $50,000.

PHILADELPHIA, PA.—The Alpha Knitting Mills, manufacturers of sweaters, cardigans and fancy knit goods, have purchased a lot at the corner of Sixth and Spring Garden Sts., and will erect a 5-story modern concrete building, 40 × 67 ft. Work will begin about May 1, and it is expected that the building will be completed by Dec. 1.

✚It has been announced that the Electric Storage Battery Co., 19th St. and Allegheny Ave., has closed a contract with JOHN G. BROWN, Witherspoon Bldg., for the design and construction of a reinforced-concrete building. This addition to its present plant will be approximately 300 ft. × 115 ft., six stories high, with a 1-story triangular extension, about 80 × 120 ft. These buildings will be constructed by the system of mushroom reinforced-concrete construction and strictly reinforced fireproof. Construction is to start at once and they are to be completed during the Fall, giving employment to a large additional force of workmen.

✚The WILLIAM STEELE & SONS CO., 1600 Arch St., has signed the contract for the erection of the new plant, at Tenth St. and Allegheny Ave., for the Hohlfeld Mfg. Co., which will cost about $125,000. The plant includes a 3-story and basement main building, 62.6 × 249.4 ft., of reinforced concrete; a 1-story boiler room, 23.6 × 52 ft., with a radial brick stack; a 1-story engine room, 24.6 × 52.1 ft., of reinforced-concrete construction, and a 1-story storage building, 116 × 15.6 ft., at the east end and 24 ft. at the west end. Noted on March 30.

The same builders are estimating on a 5-story addition, 69.5 × 100.3 ft., to the plant of the North Bros. Mfg. Co., American St. and Lehigh Ave.

✚PHILADELPHIA, PA.—The WILLIAM STEELE & SONS CO., 1600 Arch St., has contracts for the erection of a 4-story building at 1028 Chestnut St., for George S. Graham, to cost $23,000.

✚CAREY & REED have been awarded the contract for concrete work in the factory at 633-637 Arch St. for C. E. Morris. Cost, $24,000.

WEST MIDDLESEX, PA.—Articles of incorporation have been filed by the George W. Mason Engineering & Mfg. Co. for the purpose of erecting a factory to manufacture heaters. It is proposed to start the erection of the main building at once. It will be built of concrete, with a length of 100 ft. and width of 36 ft. The land which was obtained is a tract lying along the Erie R. R. just at the north end of Middlesex, and has a frontage of 100 ft. on the Erie tracks and 75 ft. on the street railway tracks. The length is given at 400 ft. The officers are: Frank Large, of Sharon, Pres.; Joseph Metz, of West Middlesex, Vice-Pres.; Charles Pierce, Treas., and William E. Elliott, Secy., both of Sharon. The capital stock is $10,000, it is reported.

RICHMOND, VA.—The R. A. Patterson Tobacco Co. has bought ten acres of land for the purpose of establishing a plant with a yearly capacity of 30,000,000 lbs. The cost, including the machinery, will be in the neighborhood of $1,000,000.

✚GREENVILLE, S. C.—The Westervelt Mills, of Greenville, have awarded the contract for the electrical equipment to the WESTINGHOUSE ELECTRIC & MFG. CO., of Pittsburg, Pa. Power will be furnished by the SOUTHERN POWER CO., we are officially advised. Full details were given March 2.

✚The Duncan Mills, of which J. Adger Smith, Jr., is Pres., has awarded the contract for the construction of the company's buildings to the FISKE-CARTER CONSTRUCTION CO., of Worcester, Mass. This contract calls for completion by Oct. 15. These structures will provide space for 50,000 spindles and 1,500 looms. Noted on March 9.

ROME, GA.—Bids will be received some time in August for the construction of a cement plant for the Ball Mountain Portland Cement Co. at Rome. Approximate cost, $400,000. Machinery is needed for the making of 2,000 bbls. of cement daily. Address J. S. Bass, of Rome.

MONTGOMERY, ALA.—It is reported that the Texas Co., of Houston, Tex., plans to establish a branch plant in Montgomery. There will be three frame buildings, 30 × 120 ft., 34 × 45 ft., and 24 × 48 ft., respectively. The cost, including oil tanks, etc., will be $15,000.

MEMPHIS, TENN.—The Memphis Rice Mill Co. is being chartered by J. D. Marks, of Crowley, La., and associates for the purpose of establishing a rice mill in Memphis. The capital stock will be $100,000.

ASHTABULA, OHIO.—The Lake Shore Ry. Co. has issued orders for the immediate construction of two more machine shops on the Superior No. 1 and the Union docks.

Plans have been prepared for a plant, with a capacity of 50,000 paving bricks a day, for the Ashtabula Shale Brick Co.

CINCINNATI, OHIO.—Plans are being prepared by Theodore Rechter for an addition to the plant on Davis Lane, which the Charles Boldt Glass Co. proposes to erect. Noted on March 30.

✚NEW BREMEN, OHIO.—The contract for the erection of a brick and cement structure, 40 × 100 ft., for sheltering a bridge manufacturing plant in New Bremen, has been awarded to HENRY VANDERHORST and FRED VORNHOLT, both of New Bremen. The building is to be ready for occupancy on or before July 1.

IRONVILLE (Toledo post-office), OHIO.—William B. Hunt, Spitzer Bldg., Toledo, is preparing plans for a 1-story and basement factory for the Monarch Mfg. Co., of Ironville. It will be of reinforced concrete construction.

TOLEDO, OHIO.—Edward Thal & Co., Ohio Bldg., Toledo, will soon receive estimates on a 3-story and basement factory and warehouse, 85 × 180 ft., for the Western Mfg. Co. Cost, $40,000.

Langdon & Hohly, Nicholas Bldg., have prepared plans, and will soon let contracts, on a 2-story and basement factory, 40 × 100 ft., for the Advance Machine Co., J. A. Taggart, Prop., 525 Hamilton St.

G. S. Mills, Ohio Bldg., has been selected by the Willis Overland Auto Co., of Toledo, to prepare plans for an addition to its plant.

✚The same architect has awarded the general contract for the 3-story and basement laundry, 97 × 60 ft., to be located at Tenth and Monroe Sts., for the Reliable Laundry Co., 2144 Monroe St., to M. RABBET & SON, Nasby Bldg. Cost of buildings, $30,000.

TOLEDO, OHIO.—George S. Mills, Arch., Ohio Bldg., has been engaged to prepare plans for a 5-story plant on the site of the old one, for the Toledo Biscuit Co., recently incorporated with a capital of $150,000. Among those interested are: Emery Thierwachter, of Oak Harbor; J. M. Bour, Toledo, and C. H. Streetman, Cincinnati. M. E. Bettridge is Gen. Mgr.

✚DETROIT, MICH.—Pollmar & Ropes, Cleland Bldg., have awarded the following contracts for the 3-story and basement addition, 34 × 57 ft., to the bakery of Gordon-Pagel Co., 461 Chene St.: Structural iron work, H. B. LEWIS, 45 Joseph Campus Ave.; masonry, GEORGE D. NUTT, Hamilton Boulevard and Blaine Ave.; carpentry, STRELOW & PETT, 700 Mack Ave.

✚Mildner & Eisen, Hammond Bldg., have awarded the general contract for the 2-story engine house, 60 × 32 ft., for Kaiser & Schmidt, 407 Wilkins St., to C. J. KELLER & CO., 657 Canfield Ave., East.

✚GRAND RAPIDS, MICH.—The Pere Marquette R. R. Co., Grand Rapids, has let the general contract for the 45-stall roundhouse to be erected in the Wyoming yards, to HAUSER, OWEN & AMES, 102 North Ottawa St., Grand Rapids. Cost, $75,000.

SAGINAW, MICH.—Cowles & Mutcheller, Chase Bldg., Saginaw, are preparing plans for a cold storage plant, four stories and basement, 97 × 74 ft., for the Cornwell Beef Co., Thompson and Franklin Sts., Saginaw. The architects will be ready for estimates soon. Cost, $40,000.

CHICAGO, ILL.—Holabird & Roche, Archs., 98 Jackson Boulevard, will receive bids about April 25 for the construction of a 6-story printing building on Clark St., near Harrison St. Poole Bros., 106 Harrison St., are the owners.

The Franklin Co., engravers, will erect a 12-story fireproof building to cost about $250,000, on the premises recently acquired at 422-424 Dearborn St. Edward D. Moeng is Pres.

✚PEORIA, ILL.—The Behrends Ice & Fuel Co. has been granted a permit to erect its plant on lower South Washington St. by J. A. Schneider, Building Comr. The building will be built of brick and is estimated to cost in the neighborhood of $20,000. GERDES & BECKER are the contractors.

✚MILWAUKEE, WIS.—The International Harvester Co. has awarded the contract for the structural steel work on the $200,000 machine shop on Park St., between 14th and 15th Aves., Milwaukee, to the McCLINTIC-MARSHALL CONSTRUCTION CO., of Chicago. Approximately 1,500 tons of fabricated material will be required. Noted last week.

The Keystone Glue Co., of Williamsport, Pa., has acquired a site of 45 acres on Lake Michigan at South Milwaukee and proposes to erect a $300,000 plant, beginning work about July 1.

RACINE, WIS.—The Hamilton-Beach Co., manufacturers of electrical goods and devices, is looking for a site for the proposed $35,000 factory contemplated for erection this summer.

✚KANSAS CITY, MO.—The contract to erect a 4-story mill building, 48 × 52 ft., a 1-story engine room, 38 × 20 ft., a 1-story warehouse, 42 × 100 ft., has been awarded to GEORGE H. SIEDHOFF, of this city. The mill and power-house will be of concrete construction while the warehouse will by of corrugated iron. Smith, Rea & Lovett, Archs., prepared the plans.

ALPINE, TEX.—Oscar Pacius, of Monterey, Mex., and associates are preparing to erect a plant here for the manufacture of wax from the candelilla weed that grows wild in great profusion in this part of the State.

AUSTIN, TEX.—The Tips Foundry & Machine Co. has increased its capital stock from $20,000 to $40,000. It will make enlargements and improvements.

BROWNSVILLE, TEX.—R. G. Wagner, of Milwaukee, Wis., Pres. of the Wisconsin Sugar Co., has been making a personal investigation of the adaptability of the soil and climate of the lower Rio Grande Valley for the growing of sugar beets with the view of engaging in the industry on a large scale and establishing a beet sugar factory, it is stated.

GAINESVILLE, TEX.—A factory for the manufacture of overalls will be established here by D. W. Crawford. He will install 30 machines.

HARLINGEN, TEX.—O. P. Black, of Houston, and associates, are arranging to construct a cotton compress at Harlingen, to cost about $25,000. It is planned to have it finished in time to handle this season's crop.

✚HOUSTON, TEX.—A. STATTLEMAN, of Oklahoma City, Okla., has entered into a contract with the Terminal Stock Yards Co., of Houston, for the erection of a fertilizer and rendering plant here.

The Weisenborn Mfg. Co. will soon begin the erection of its foundry and machine shop buildings at Port Houston. The company will manufacture woven wire.

LONGVIEW, TEX.—The Longview Hardwood Specialty Co. is being organized here to erect a factory for the manufacture of various articles out of hardwood timber. It is stated that the proposed plant is to cost more than $100,000 and will give employment to several hundred people.

ROSWELL, N. MEX.—C. M. Allison will erect a plant here for the manufacture of what is known as "cement brick."

SALT LAKE CITY, UTAH.—Plans are now being prepared for the erection of another factory in Salt Lake City for the construction of a patent water elevator for irrigation projects. The plans are for a $10,000 plant. The company will manufacture a water elevator patented by E. V. K. Atcheson, 427 K St., who is Pres. and Gen. Mgr.

SPOKANE, WASH.—A warehouse and cold storage plant, valued at $200,000, is to be erected by the Schade Brewing Co. on the vacant property adjoining their brewery site at Front Ave., Sheridan and Hatch Sts.

TACOMA, WASH.—The Northwest Table Mfg. Co. has filed articles of incorporation with a capital stock of $500,000. The new company will establish a plant in Tacoma in the near future. It is planned to manufacture and sell all kinds of both office and household furniture. The company will also make arrangements to purchase lands and operate sawmills on the land, it is reported.

KENTON (Portland post-office), ORE.—By the signing of a memorandum of agreement in Chicago recently by Louis Swift, on the part of Swift & Co., and M. J. Sulzberger, for Schwarzschild & Sulzberger, a tentative arrangement has been perfected for the construction of a $2,000,000 packing plant in the Kenton district. Negotiations have been pending a year and with the successful conclusion confirmed in the despatch from New York the enterprise will represent the largest and most important commercial move of the year. It is the understanding that there will be erected in the packinghouse district, now occupied by the Swift concern, a plant even larger than that of the Swifts and modern in every respect, according to reports.

PERRIS, CAL.—The Southwestern Sugar Co., Laughlin Bldg., Los Angeles, will award contracts shortly for constructing the following structures near Perris: Concrete machinery building, 100 × 100 ft.; main factory building, 350 × 75 ft., three to five stories, of steel and concrete; warehouse, 200 × 60 ft.; boiler house, 40 × 120 ft.; officers quarters, etc. Cost of buildings, $125,000.

OAKLAND, CAL.—A lot on Telegraph Ave., between 19th and 20th Sts., has been purchased by Emil Lohnhardt, 1157 Broadway, for the purpose of erecting a candy factory. It will be three stories high, of concrete construction. The cost, including building, ground, etc., will be about $60,000.

SACRAMENTO, CAL.—Plans are being prepared for a building to be erected by the Capital Box Co. at the corner of Second and Q Sts., on the site of the old mill, which was destroyed by fire recently. The building will be of reinforced concrete and fireproof.

HALIFAX, N. S.—The British Canadian Shipbuilding & Dock Co. has been incorporated with a capital of $10,000,000, for the purpose of constructing a shipbuilding plant at Sydney Harbor. The following are directors: Sir Henry Pellatt and Lieut.-Gov. J. M. Gibson, of Toronto; Charles Ellis and Alexander Gracie, of the Fairfield Shipbuilding Co., Clydebank, Scotland, and A. Cross, of Sydney.

✚PORT ARTHUR, ONT.—BARRET & McQUEEN, of Fort William, have been given a contract to build an addition of 50,000 tons capacity to the storage plant of the Canadian Ore & Coal Dock Co., at a cost of $75,000.

## MISCELLANEOUS CONTRACTS.

(*Denotes that this work is advertised in Engineering News.)

U. S. RECLAMATION SERVICE.—All news concerning canal and irrigation projects, etc., will be found under Water Supply—Irrigation.

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✚REMOVING BOULDERS.—Boston, Mass—Bids were received as follows on April 14 by the State Harbor and Land Commissioners, Boston, for removing about 900 tons of boulders from the channel of North River: Merritt & Chapman Derrick & Wrecking Co., of West Virginia, 36 Atlantic Ave., Boston, $9.94 per ton; Frederick D. Lawley, Ericsson St., Neponset, Mass., $4.87; Betts Bros. & Co., 16 New St., East Boston, Mass., $3.47; Hiram W. Phillips, 734 Washington St., Quincy, Mass., $3.25; THOMAS FITZ GIBBON, 10 Bank Bldg., Beverly, Mass., $2.83 (awarded contract).

LANDING PIERS.—Boston, Mass.—Bids will be received until April 25 for building landing piers by the Metropolitan Park Commission, one at Cambridge Bridge, near Berkeley St., two at Harvard Bridge, and one near Galen St. Bridge, Watertown. John R. Roblin is Ch. Engr. Comn.

JETTY WORK.—Boston, Mass.—Thomas Fitz Gibbon, 10 Bank Bldg., Beverly, Mass., submitted the only bid on April 14 to the State Harbor and Land Commissioners, Boston, for building a jetty at the mouth of Ipswich River at $2.43 per ton. The work includes furnishing and depositing in place about 2,500 tons of granite quarry grout and chips. No bids were received same date for furnishing and depositing in place about 1,500 tons of granite quarry grout and chips at the inner end of the present stone jetty at Scorton Harbor. George E. Smith is Chmn. Bd. Comrs., Boston.

BREAKWATER REPAIR.—Boston, Mass.—Bids will be received until noon, May 12, by Col. Frederic V. Abbott, Corps Engrs., U. S. A., Boston, for repairing the breakwater at Gloucester, Mass.

*DREDGING.—Newport, R. I.—Bids will be received until 2 p. m., May 15, by Lt.-Col. J. C. Sanford, Corps Engrs., U. S. A., Newport, for dredging in Providence Harbor, R. I.

LAUNCH BASIN, ETC.—Fort Hamilton (Brooklyn post-office), N. Y.—Bids will be received until May 12 by the Constructing Quartermaster, U. S. A., Fort Hamilton, for the construction of a launch basin and improvements to wharf.

*CHANNEL EXCAVATION.—Buffalo, N. Y.—Bids for channel excavation in the Niagara River, N. Y., were opened on April 10 by Lt.-Col. J. G. Warren, Corps Engrs., U. S. A., as follows: (a) excavation of blasted rock, scow measure, 9,000 cu. yds., (b) total: Empire Engineering Corporation, New York, (a) 83 cts. per cu. yd., (b) $7,470; Buffalo Dredging Co., Buffalo, (a) 76 cts., (b) $6,840; Arthur H. Vogel, Milwaukee, Wis., (a) 79 cts., (b) $7,110.

DREDGING AND FILLING.—New York, N. Y.—Bids will be received by Alfred E. Steers, Pres. Boro. Brooklyn, until 11 a. m., April 26, for furnishing all the labor and material required for dredging and filling at the Eighth Ward market property, between 36th and 38th Sts., New York Bay, Boro. Brooklyn.

PORTABLE SCHOOL HOUSE.—New York, N. Y.—Bids wil be received by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, until 11 a. m., May 1, for furnishing and eretcing a 4-room portable school house, toilet building, sanitary work, etc., on the premises of Public School 48, at Spofford, Coster and Faile Sts., Boro. of the Bronx.

FIRE PROTECTION WORK, ETC.—New York, N. Y.—Bids wil be received until 11 a. m., May 1, by C. B. J. Snyder, Supt. School Bldgs., Dept. of Education, for fire protection work, etc., at Public Schools 25, 29, 30, 31, 38 and 40, Boro. The Bronx; also for new metal ceiling at Public Schools 8, 14, 18, 37, 49, 70 and 73, Boro. Manhattan; also for new fireproof main stairs at Public Schols 8, 18, 71, 87, 104 and 120, Boro. Manhattan.

FIRE PROTECTION SYSTEM, ETC.—New York, N. Y.—Bids will be received by Kingsley L. Martin, Comr. of Bridges, until 2 p. m., April 27, for installing fire protection system and compressed air line on the Manhattan Bridge over the East River, between the Boroughs of Manhattan and Brooklyn.

ROPE.—New York, N. Y.—Bids will be received by R. Waldo, Fire Comr., until 10.30 a. m., May 18, for furnishing and delivering manila rope, etc., for fireboats, etc.

IMPROVING PLAYGROUND.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., April 27, for improving the playground located in the block bounded by Amsterdam Ave., West End Ave., 59th St. and 60th St.

PLAYGROUND.—New York, N. Y.—Bids will be received by the Park Board, Dept. of Parks, until 3 p. m., April 27, for constructing Bushwick playground, bounded by Putnam Ave. and Woodbine St. Extension between Knickerbocker Ave. and Irving Ave., Boro. Brooklyn.

✚PILING FOUNDATIONS.—New York, N. Y.—The contract for the piling foundations of the Pilgrim Laundry Building, Eleventh Ave. and 17th St., Boro. Brooklyn, has been awarded to the MACARTHUR CONCRETE PILE & FOUNDATION CO., of New York. The piles will be of the pedestal type. Kirby & Pettit are Archs.

*DREDGING.—New York, N. Y.—Bids will be received until noon, May 18, by Col. S. W. Roessler, Corps Engrs., U. S. A., New York, for dredging in Flushing Bay, Hempstead Harbor and Huntington Harbor, N. Y.

REPAIRS TO SCOWS.—New York, N. Y.—Bids will be received by W. H. Edwards, Comr. St. Cleaning, until noon, April 28, for furnishing all the labor and materials required for repairs to scows Nos. 9 and 16 of the Department of Street Cleaning.

ROPE.—New York, N. Y.—Bids will be received by R. Waldo, Fire Comr., until 10.30 a. m., April 27, for furnishing and delivering manila rope, etc., for fireboats, etc.

*DREDGING.—Oswego, N. Y.—Bids will be received until 10 a. m., May 15, by Capt. W. L. Guthrie, Corps Engrs., U. S. A., Oswego, for dredging at Ogdensburg Harbor and Charlotte Harbor, N Y.

✚BATHING PLANT.—Asbury Park, N. J.—Bids were received as follows on April 11 by the Public Grounds Commission for the construction of a bathing plant and pool on the east side of Ocean Ave., between First and Second Aves.: Frank N. Goble, $89,590; A. Whitehead, $82,350; C. H. Peckworth, $85,394; H. O. Gardner, $82,088; J. A. Conklin, $99,000; I. R. TAYLOR & CO., Asbury Park, $80,000 (awarded contract).

JETTIES.—Fort Hancock, N. J.—Bids will be received until 11 a. m., May 3, by the Commanding Officer, Sandy Hook Proving Ground, Fort Hancock, for constructing about 1,900 ft. of wood jetties

✚CAR HOUSE.—Newark, N. J.—The Public Service Corporation has awarded a contract to STILLMAN, DELEHANTY & CO., for constructing a car storage house at $21,000. The building will be 100 × 400 ft.

JETTIES.—Ventnor City, N. J.—No bids were opened by the city on April 12 for constructing jetties. New bids will be asked.

LUMBER.—Jersey City, N. J.—Bids will be received until 2 p. m., April 24, by the Board of Street and Water Commissioners for furnishing and delivering lumber.

*STEAM SHOVEL WORK.—Slatington, Pa.—MacArthur Bros. Co., 11 Pine St., New York, have 75,000 cu. yds. of steam shovel work in Pennsylvania to let, suitable for small shovel outfit. Address MacArthur Bros Co., New York, or Slatington.

✚DREDGING.—Wilmington, Del.—Bids for dredging Cat River and Bogue Bay, Va., were received by Maj. R. R. Raymond, Corps Engrs., U. S. A., Wilmington, on March 30, as follows: MINER ENGINEERING CO., Washington, D. C., 15½ cts. per cu. yd., place measurement (awarded contract); River & Harbor Improvement Co., Philadelphia, Pa., 16.8 cts.; McLean Contracting Co., Baltimore, Md., 27 cts.; W. H. French, Norfolk, Va., 35 cts.; The Rickards Dredging Co., Philadelphia, Pa., 24 cts.

WIRE AND CABLE.—Washington, D. C.—Bids will be received until 10.30 a. m., April 21, by Capt. A. S. Cowan, Disbursing Officer, Signal Corps, U. S. A., War Dept., Washington, for furnishing 500 ft. of brass wire; 600 ft. of high-tension wire; 1,000 ft. of low-tension wire, and 1,000 ft. of cable.

STEAM ENGINES, ETC.—Washington, D. C.—Bids will be received by the Commissioners of the District of Columbia, until 2 p. m., April 25, for furnishing two steam engines, and two generators for use in the McKinley Manual Training School.

REVENUE CUTTERS.—Washington, D. C.—Bids were received as follows on April 12 by the Revenue Cutter Service, Treasury Dept., Washington, for the construction of revenue cutters Nos. 22 and 24: Newport News Shipbuilding & Dry Dock Co., Newport News, Va., (sole bidder), No. 22, $240,000, on department's plans modified; Nos. 22 and 24, $476,000; with Babcock & Wilcox boilers, $480,000. Time, one year.

✚COAL WASHING PLANT.—Richmond, Va.—The Old Dominion Development Co. has awarded the contract for the construction of a Stewart coal washing plant to ROBERTS & SCHAFER CO., Chicago, Ill. The capacity of the plant is 40 tons per hour and will be built for about $12,000.

*DREDGING.—Norfolk, Va.—Bids will be received until noon, May 15, by Lt.-Col. Mason M. Patrick, Corps Engrs., U. S. A., Norfolk, for dredging the channel to Newport News, Va.

✚DREDGING.—Wheeling, W. Va.—Bids were received as follows on April 13 by Maj. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for dredging 38,000 cu. yds. at Dam No. 11, Ohio River: Sheridan-Kirk Contract Co., Cincinnati, Ohio, 37.5 cts. per cu. yd.; total, $14,250. MONONGAHELA & WESTERN DREDGING CO., Pittsburg, Pa., 30 cts.; $11,400 (awarded contract).

*LOCK AND DAM.—Wheeling, W. Va.—Bids are asked until 11 a. m., May 17, by Maj. F. W. Altstaetter, Corps Engrs., U. S. A., Wheeling, for constructing Lock and Dam No. 20, Ohio River, near Belleville, W. Va.

✚VACUUM CLEANER, ETC.—Lawndale, N. C.—The Cleveland Mill & Power Co., of Lawndale, has decided to install a turbo-humidifyer and vacuum cleaning apparatus. The contract has been awarded to the G. M. PARKS CO., of Fitchburg, Mass.

REPAIRS TO DOLPHINS.—Southport, N. C.—Bids will be received until April 25 by William M. Bryan, Custodian, U. S. Public Health and Marine Hospital Service, Cape Fear Quarantine Station, Southport, for repairs to dolphins at the station.

✚FILLING.—Columbia, S. C.—The Seaboard Air Line Ry. Co., it is reported, has awarded a contract to LANE & CO., of Atlanta, Ga., for filling in trestle cuts, about 286,000 yds.

STEEL BARGES.—Vicksburg, Miss.—Bids were received as follows on April 5 by Capt. Clarke S. Smith, Corps Engrs., U. S. A., Vicksburg, for furnishing [illegible] steel barges: (a) delivered at Memphis [illegible] (b) delivery at place named per [illegible]: Memphis Steel Construction Co., Memphis, (a) $13,350; Des Moines Bridge [illegible] Co., Pittsburg, Pa., (a) $11,900, [illegible] $11,550; Neville Island, Pa.; American [illegible] Co., Pittsburg, Pa., (a) $9,400; [illegible] field Boiler & Mfg. Co., Springfield, Ill. [illegible] $12,191, Grafton, Ill.

RIPRAP.—Vicksburg, [illegible] Bids have been received as follows [illegible] Clarke S. Smith, Corps Engrs., U. S. A., Vicksburg, for furnishing riprap; (a) 25 [illegible] cu. yds. on government barges; (b) pla[illegible] loading; (c) 15,000 cu. yds. on contr[illegible] barges at Memphis; (d) totals: W. [illegible] Arnold, Cape Girardeau, Mo., (a) 75 cts [illegible] cu. yd., (b) about 1½ miles above Neel[illegible] (d) $18,750; Oscar F. Barrett, Cin[illegible] Ohio, (c) $2.10 per cu. yd., (d) $[illegible] Miles & Straub, Helena, Ark., (a) $[illegible] per cu. yd., (b) Helena, Ark., (c) $50,7[illegible] The following informal bids for the [illegible] were received: Miles & Straub, He[illegible] Ark., 15,000 cu. yds., $1.35 f. o. b. c[illegible] tracks of Rock Island R. R., at Whe[illegible] Ark. William Parkin, Little Rock, A[illegible] 15,000 cu. yds., 73½ cts. f. o. b. cars [illegible] land grant portion of St. Louis Iron Mo[illegible] & Southern Ry. Ward & Carmack, Little Rock, Ark., 40,000 cu. yds., 65 cts [illegible] o. b. cars at quarry on land grant road [illegible] upon arrival of stone at Hopefield, Ark., w[illegible] unload same on bank for 25 cts. per cu. [illegible] additional. Hatterjohn Construction Co., Paducah, Ky., 40,000 cu. yds., $1.25 f. o. b. [illegible] Memphis, Tenn., or $1.35, delivered on ground at Telcher plant, about five miles below Memphis. Edward Hely, Cape Girardeau, Mo., 15,000 cu. yds., $1.80, delivered on bank at Hopefield or West Memphis, Ark.

FREIGHT YARDS.—Latonia, Ky.—The Louisville & Nashville Ry. Co. has let a contract for the construction of new freight yards and a double-hump switching system at Decoursey, near Latonia, with a capacity of 4,000 cars per day.

ELEVATOR.—Columbus, Ohio.—Bids were received as follows on April 17 by James Knox Taylor, Superv. Arch., Treasury Dept. Washington, D. C., for the installation of an elevator in the Columbus post-office: Llewellyn Iron Works, Los Angeles, Cal., $16,7[illegible]; Otis Elevator Co., 17 Battery Pl., New York, $11,162.

CRUSHED STONE.—Cincinnati, Ohio.—Bids will be received at the office of the Director of Public Service until noon, April 25, for furnishing and delivering in good condition crushed stone and stone chips to the city for the use of the Street and Sewer Repair Department. Specifications and blank proposals can be obtained at the office of the Superintendent of the Street and Sewer Repair Department. John J. Wenner is Clk.

CONCRETE WAGON SHEDS, ETC.—Cincinnati, Ohio.—Bids will be received until noon, April 27, by the Board of Park Commissioners for furnishing the necessary labor and material for the construction of concrete wagon sheds, concrete retaining wall, and for moving and reconstructing the present stable at Eden Park.

DITCH.—Youngstown, Ohio.—Bids will be received until May 2 by the Board of County Commissioners for constructing various sections of the Boardman Ditch in Boardman Township. W. B. Jones is County Audr.

(Continued on page 193.)

## CONTRACT PRICES.

*WATER PIPE.—Pittsfield, Mass.—Bids were received on March 27 by the Committee on Water Supply for furnishing c.-i. water pipe from (A) CHAS MILLAR & SON CO. Utica, N. Y. (awarded contract) (B) U. S. Cast Iron Pipe & Foundry Co., 71 Broadway, New York; (C) Warren Foundry & Machine Co., 111 Broadway, New York; (D) Standard Cast Iron Pipe & Foundry Co., Bristol, Pa.; (E) R. D. Wood & Co., 400 Chestnut St. Philadelphia, Pa. The item prices were as follows:

WATER PIPE, PITTSFIELD, MASS.

| | A | B | C | D | E |
|---|---|---|---|---|---|
| 1,000 tons 18-in. c.-i. pipe, Class C | $21.70 | $21.80 | $23.30 | $22.70 | $21.77 |
| 1,480 tons 24-in. c.-i. pipe, Class C | 21.70 | 21.80 | 23.30 | 22.70 | 21.77 |
| 1,300 tons 14-in. to 24-in. c.-i. pipe, Class C | 21.70 | 21.80 | 23.30 | 22.70 | 21.77 |
| 20 tons standard special castings | 45.00 | 47.00 | 47.50 | 50.00 | 48.10 |
| Totals | $82,926 | $83,344 | $89,024 | $86,806 | $83,252 |

CONCRETING RESERVOIR.—Ogden, Utah—Bids for concreting City Reservoir No. 1 have been received from (A) Moran Contracting Co.; (B) McKay & Reed; (C) J. P. O'Neill Construction Co.; (D) Gillis Construction Co.; (E) Lynch-Cannon Engineering Co.; (F) Wheelwright Construction Co.; (G) William Doyle. The item prices were:

CONCRETING RESERVOIR, OGDEN, UTAH.

| | A | B | C | D | E | F | G |
|---|---|---|---|---|---|---|---|
| 12,618 cu. yds. excavation | $0.20 | $0.30 | $0.40 | $0.46 | $0.36 | $0.50 | $0.55 |
| 53 cu. yds. concrete in outlet gate chamber | 6.80 | 9.00 | 9.00 | 9.00 | 12.00 | 9.00 | 9.00 |
| 1,502 cu. yds. concrete in reservoir | 6.80 | 6.90 | 7.00 | 7.00 | 7.54 | 7.00 | 6.95 |
| 1 outlet gate house | 150.00 | 125.00 | 86.00 | ..... | 110.00 | 75.00 | ..... |
| Hauling and laying Matthewson joint pipe: | | | | | | | |
| 110 lin. ft. 12-in. pipe | .40 | .15 | .44 | .10 | .25 | .24 | .46 |
| 100 lin. ft. 20-in. pipe | .60 | .30 | .54 | .10 | .30 | .40 | .70 |
| 120 lin. ft. 24-in. pipe | .90 | .40 | .65 | .10 | .35 | .48 | .84 |
| Hauling and laying vitrified cement pipe: | | | | | | | |
| 350 lin. ft. 6-in. pipe | .20 | .06 | .08 | .10 | .12 | .12 | .17 |
| 25 lin. ft. 8-in. pipe | .30 | .10 | .12 | .10 | .18 | .16 | .40 |
| 25 lin. ft. 10-in. pipe | .35 | .15 | .18 | .10 | .23 | .20 | .48 |
| 100 lin. ft. 12-in. pipe | .40 | .20 | .34 | .10 | .29 | .24 | .50 |
| 750 lin. ft. constructing and erecting fence | 1.33 | 1.20 | 1.08 | 1.00 | 1.18 | 1.50 | 1.43 |
| Removing old material (lump sum) | ..... | ..... | 81.00 | ..... | 50.00 | 50.00 | ..... |
| 1 setting 36 × 36-in. C. L. grating | 7.00 | 2.00 | 5.50 | 10.00 | 5.00 | 2.00 | 5.00 |
| 6 setting 12 × 18-in. gratings | 1.15 | .50 | 1.00 | 10.00 | 2.00 | 2.00 | 3.00 |
| Totals | $14,597.85 | $15,797.95 | $17,276.60 | $17,608.28 | $17,746.31 | $18,763.00 | ...... |

## MISCELLANEOUS CONTRACTS.

(Continued from page 192.)

✚COALING STATION.—Greensburg, Ind.—The contract for the building of a 500-ton Holmer coaling station, wood frame, for the Cleveland, Cincinnati, Chicago & St. Louis Ry. Co., Greensburg, has been awarded to the ROBERTS & SCHAFER CO., Chicago, Ill. Approximate cost, $18,000.

✚DITCH.—Monticello, Ind.—Contracts have been awarded as follows by Paul Ward, Drainage Engr., for the ditch petitioned for by John Vannata and others in White and Boston Counties: To JAMES L. TAYLOR, for dredge work, at $52,000; to CASEY & LEE, for tile and open work, at $11,605. Bids were opened on April 8.

✚DRAINAGE.—Petersburg, Ind.—James Woolston, Drainage Supt., has awarded the contract for the Toops drainage work to the NAPPANEE DRAINAGE CO., of Nappanee, Ind., at $53,000. The ditch will be 26 miles long.

DESIGN FOR MONUMENT.—Vincennes, Ind.—Nine bids were opened on April 11 by John F. Scott, County Audr., for a design for the erection of a soldiers' monument. All but the following were eliminated: Standard Monument Works, of Vincennes, Ind.; C. N. Clark, of Urbana, Ill.; McDonald & Son, of Indianapolis; Terre Haute Monument Co., of Terre Haute, Ind. Final selection will be made next month.

*DREDGING.—Detroit, Mich.—Bids were received as follows on April 10 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for dredging the harbor at Rogers City: Greiling Bros. Co., Green Bay, Wis., 85 cts. per cu. yd., scow measurement; Great Lakes Dredge & Dock Co., Chicago, Ill., 80 cts.; Edward Bros. Dredge Co., Sault Ste. Marie, Mich., 99 cts.; James Davidson, Bay City, Mich., 75 cts.

*DREDGING.—Detroit, Mich.—Bids were received as follows on April 10 by Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for dredging, at Ballards Reef, Detroit River: Edward Bros. Dredge Co., Sault Ste. Marie, Mich., $3.49 per cu. yd., place measurement; Kyermann Bros., Toledo, Ohio, $4.85; The Brindley Co., New York, N. Y., $3.08; Great Lakes Dredge & Dock Co., Chicago, Ill., $4.25; The Buffalo Dredging Co., Buffalo, N. Y., $2.65; M. Sullivan, Detroit, $2.61.

*SLUICE GATES.—Detroit, Mich.—The lowest bid submitted to Col. C. McD. Townsend, Corps Engrs., U. S. A., Detroit, for the con-

# LIST OF CONTRACTS PENDING

## Plans and Specifications on File.

The following plans (P.) and Specifications (S.) are on file for reference only unless otherwise noted at the office of The Engineering News Publishing Co., 220 Broadway, New York.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-22 | Dry kiln, Norfolk, Va. | (S.) 3-23 |
| 4-29 | Boilers, etc., Hawaii | (S.) 4-6 |
| 4-29 | Dredging, Boston, Mass. | (S.) 4-6 |
| 5-6 | Repairs to slips, Norfolk, Va. | (S.) 4-6 |
| 5-27 | Wharf, trestle, etc., Alaska | (S.) 4-13 |
| 6-1* | Canal enlargement, Boise, Idaho | (S.) 3-30 |
| 6-3 | Floating cranes, Hawaii | (S.) 4-6 |

## Light, Heat and Power Plants.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-21 | Wiring, Yonkers, N. Y. | 4-13 |
| 4-21 | Heating system, Houston, Tex. | 4-20 |
| 4-24 | Boiler and conduit, Sawtelle, Cal. | 4-6 |
| 4-24 | Conduit and boiler, Los Angeles, Cal. | 4-6 |
| 4-24 | Electric wiring, New York, N. Y. | 4-13 |
| 4-24 | Arc lights, Plymouth, Pa. | 4-20 |
| 4-25 | Conduit, wiring and gas piping system, Jefferson City, Mo. | 4-13 |
| 4-25 | Lighting arrestors, Toronto, Ont. | 4-20 |
| 4-25 | Maintaining lights, Kingston, Ont. | 4-20 |
| 4-27 | Generators, etc., Boise, Idaho | 4-20 |
| 4-25 | Steam engines and generators, Washington, D. C. | 4-20 |
| 4-27 | Electrical switching equipment, Winnepig, Man. | 4-6 |
| 4-28 | Franchise, Susanville, Cal. | 4-6 |
| 4-29 | Boilers, etc, Hawaii (U. S. Poss.) | 4-6 |
| 5-1 | Lighting fixtures, Wash., D. C. | 4-6 |
| 5-1 | Electrical supplies, Benicia, Cal. | 4-6 |
| 5-1 | Machinery, Yonkers, N. Y. | 4-6 |
| 5-1 | Lighting standards, Winnipeg, Man. | 3-23 |
| 5-1 | Heating and ventilating system, Lorain, Ohio | 4-20 |
| 5-3* | Heating plant, Ft. Totten, N. Y. | 4-6 |
| 5-6 | Power plant, etc., Avondale, O. | 4-13 |
| 5-8 | Conduits and wiring and lighting systems, Richmond, Va. | 4-13 |
| 5-10* | Heating and ventilating apparatus, Richmond, Va | 4-13 |
| 5-10 | Power dam, etc., Yorkville, Ill. | 4-20 |
| 5-15* | Fuel and supplies, West Point, N. Y. | 4-20 |

## Bridges.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-20 | Bridge, Elizabethtown, Ky. | 4-20 |
| 4-21 | Draw, Boston, Mass. | 4-20 |
| 4-21 | Bridge, Yorkville, S. C. | 4-20 |
| 4-22 | Bridges, Edwardsville, Ill. | 4-13 |
| 4-24 | Bridge, New Lexington, Ohio | 4-6 |
| 4-24 | Bridge work, Norwalk, Ohio | 4-20 |
| 4-25 | Bridges, Mason, City, Iowa | 4-20 |
| 4-25 | Bridges, East St. Louis, Ill. | 3-30 |
| 4-25 | Bridge work, Napoleon, O. | 4-13 |
| 4-26 | Bridge, Port Byron, Ill. | 4-13 |
| 4-26 | Viaduct, San Francisco, Cal. | 4-6 |
| 4-26 | Bridges, Estherville, Iowa | 4-20 |
| 4-26* | Bridges, Reading, Pa. | 4-20 |
| 4-26 | Bridges, Richmond, Va. | 4-20 |
| 4-26 | Bridge, Guthrie Center, Iowa | 4-20 |
| 4-27 | Bridge, Mount Gilead, Ohio | 4-6 |
| 4-28* | Bridge, Rutherford, N. J. | 4-13 |
| 4-28 | Bridge, Topeka, Kan. | 4-20 |
| 4-29 | Viaduct, Cleveland, Ohio | 4-20 |
| 4-29 | Bridge, etc., Cleveland, Ohio | 4-13 |
| 5-1 | Bridges, etc., Bradford, Pa. | 4-13 |
| 5-1 | Bridges, Muskogee, Okla. | 4-13 |
| 5-1 | Bridges, Bloomfield, Ind. | 4-20 |
| 5-2 | Bridge work, Decatur, Ind. | 4-20 |
| 5-8 | Bridge, Shelbyville, Ind. | 4-20 |
| 5-10 | Bridge work, Newark, Ohio | 4-20 |
| 5-56 | Bridges, Dauphin, Man. | 4-20 |
| 6-17 | Bridge, Spain (Foreign) | 4-6 |

## Buildings.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-20 | Brick bank, Newburg, Wis. | 4-20 |
| 4-21 | U. S. post office, McKinney, Tex. | 3-16 |
| 4-21 | Addition to church, Wabash, Ind. | 4-6 |
| 4-21 | School, Circleville, Kan. | 4-6 |
| 4-21 | School, Edgeley, N. Dak. | 4-6 |
| 4-21 | School, Windom, Minn. | 4-6 |
| 4-21 | Improvements and additions to school, Lakewood, Ohio | 4-13 |
| 4-21 | Addition to school, Wabash, Ind. | 4-13 |
| 4-21 | School, Danville, Va. | 4-20 |
| 4-22 | School, Jersey, Ind. | 4-6 |
| 4-22 | Remodeling court-house Thief River Falls, Minn. | 4-20 |
| 4-24 | Wardhouse, Vancouver, B. C. | 4-6 |
| 4-24 | U. S. post office, Braddock, Pa. | 3-16 |
| 4-24 | School building, Saltsburg, Pa. | 4-13 |
| 4-24 | School, Upton, Wyo. | 4-20 |
| 4-24 | School, Mt. Vernon, Ohio | 4-20 |
| 4-24 | Public library, Reading, Pa. | 4-20 |
| 4-24 | Alterations and additions to school, East Orange, N. J. | 4-20 |
| 4-25 | Addition to school, Mansfield, O. | 4-13 |
| 4-25 | Federal building, Temple, Tex. | 4-13 |
| 4-25 | Court house, Broken Bow, Neb. | 4-13 |
| 4-25 | County house, West Bend, Wis. | 4-13 |
| 4-25 | U. S. post-office, Terrell, Tex. | 3-30 |
| 4-25 | School, Medford, Ore. | 3-30 |
| 4-25 | School, Suffolk, Va. | 4-6 |
| 4-25 | School, Mott, N. Dak. | 4-6 |
| 4-26 | School, Flasher, N. Dak. | 4-6 |
| 4-26 | Central post-office, Montreal, Que | 4-13 |
| 4-26 | Brick school, Cohasset, Minn. | 4-13 |
| 4-27 | Concrete school, Porterville, Cal. | 4-20 |
| 4-28 | School, Boston, Mass. | 4-20 |
| 4-28 | Grade school, Amanda, Ohio | 4-13 |
| 4-28 | School, Coldwater, Ohio | 4-20 |
| 4-29 | Court house, Prescott, Ark. | 4-13 |
| 4-29 | Public library, Columbus, Ohio | 4-20 |
| 4-30 | School, Summit, N. J. | 3-30 |
| 5-1 | Plans, Vancouver, B. C. (Mfg. Pl.) | 3-23 |
| 5-1 | School, Canonsburg, Pa. | 4-6 |
| 5-1 | Erection and remodeling of schools, London, Ohio | 4-20 |
| 5-1 | School, Lorain, Ohio | 4-20 |
| 5-1 | Postal sta. bldg., Montreal, Que. | 4-20 |
| 5-1 | School, Fennimore, Wis. | 4-20 |
| 5-1 | Tuberculosis hospital, Akron, O. | 4-20 |
| 5-1 | Building, Seattle, Wash. | 4-20 |
| 5-1 | Dormitory, Corsicana, Tex. | 4-20 |
| 5-1 | Brick school, Rosetown, Sask. | 4-20 |
| 5-1 | Portable school house, New York | 4-20 |
| 5-1 | School, New York, N. Y. | 4-20 |
| 5-2 | U. S. post-office, North Platte, Neb | 4-13 |
| 5-3 | School, Gibson, Iowa | 4-13 |
| 5-3 | Concrete barracks, San Francisco, Cal. | 4-13 |
| 5-3 | City hall, Richland Center, Wis. | 3-30 |
| 5-4* | County court-house, Auburn, Ind. | 4-6 |
| 5-4 | Machinery bldg., Des Moines, Ia. | 4-20 |
| 5-4 | School, Niles, Ohio | 4-20 |
| 5-6 | School, Athens, Ohio | 4-20 |
| 5-6 | School, Oak Harbor, Ohio | 4-20 |
| 5-8* | Addition to hospital, Ft. Totten, N. Y. | 4-20 |
| 5-9* | U. S. post-office, Fartbault, Minn. | 4-6 |
| 5-10 | U. S. post-office, court house, etc., Richmond, Va. | 4-13 |
| 5-10 | Buildings for hospital, Cincinnati, Ohio | 4-13 |
| 5-10 | Isolation hospital, Ft. Sam Houston, Tex. | 4-20 |
| 5-11* | U. S. post-office, Hope, Ark. | 4-6 |
| 5-15 | School, Pendleton, Ore. | 4-6 |
| 5-16 | Extension and remodeling of court house, Charlestown, W. Va. | 4-13 |
| 5-17 | School, Forest Hill, La. | 4-13 |
| 5-17* | U. S. post-office, Pana, Ill. | 4-13 |
| 5-18 | U. S. post-office, Coffeyville, Kan. | 4-16 |
| 5-19* | U. S. post-office and court house, Phoenix, Ariz | 4-13 |
| 5-20 | U. S. post-office, Sioux Falls, S. Dak | 4-13 |
| 5-22 | U. S. post-office, Warrensburg, Mo | 4-13 |
| 5-23 | U. S. post-office, Ft. Collins, Colo. | 4-20 |
| 5-24 | School, Waupaca, Wis. | 4-20 |
| 5-24* | U. S. post-office, Greenwood, Miss. | 4-20 |
| 5-25 | U. S. post-office and custom-house, San Diego, Cal. | 4-20 |
| 5-27 | U. S. post-office, Gadsden, Ala. | 4-20 |
| 5-27* | U. S. post office and custom house, Richford, Vt. | 4-20 |

## Water-Works.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-21* | Reservoir work, Warwick, N. Y. | 4-6 |
| 4-21 | Water pipe, Washington, D. C. | 4-13 |
| 4-21 | Pipe, hydrants, Saskatoon, Sask. | 4-13 |
| 4-21 | Valves, New York | 4-13 |
| 4-21 | Cocks, Washington, D. C. | 4-20 |
| 4-22 | Pipe, etc., Brookings, S. Dak. | 4-20 |
| 4-22* | Tank and tower, etc., Sioux City, Iowa | 4-13 |
| 4-24 | Water mains, Pleasanton, Cal. | 4-20 |
| 4-25 | Iron castings, Wash., D. C. | 4-20 |
| 4-25 | Priming equip., Toronto, Ont. | 4-20 |
| 4-25* | Water system additions, Fort H. G. Wright, N. Y. | 4-13 |
| 4-26* | Pump, etc., Baltimore, Md. | 4-6 |
| 4-26 | Pump station supplies, New York | 4-13 |
| 4-26 | Pipe, Regina, Sask. | 4-20 |
| 4-26 | Reservoir, etc., Chokto, Minn. | 4-20 |
| 4-26 | Turbines, Boise, Idaho | 4-20 |
| 4-26 | Steel rails, Boise, Idaho | 4-20 |
| 4-27 | Reservoir, Somerset, Pa. | 4-20 |
| 4-27 | Fire system, Toledo, Ohio | 4-13 |
| 4-27 | Purification plant, etc., Fargo, N. Dak | 4-13 |
| 4-28 | Reservoir, Toulon, Ill. | 4-20 |
| 4-29* | Pumps, Sioux City, Iowa (See under Proposed Advertisements). | |
| 4-29 | Water addition, Fort Dade, Fla. | 4-13 |
| 4-30 | Pump, Regina, Sask. | 4-20 |
| 5-1 | Water-works, Romney, W. Va. | 4-20 |
| 5-1 | Water meters, Sebastopol, Cal. | 4-20 |
| 5-1 | Wells, etc., Sherman, Tex. | 4-13 |
| 5-1* | Water extension, Skillman, N. J. | 4-13 |
| 5-1* | W-Wks. material, Penticton, B. C. | -6 |
| 5-1 | Water-wks., Madison Lake, Minn. | 4-20 |
| 5-2* | Water system, etc., Blauvelt, N.Y. | 4-20 |
| 5-3* | Pumping engine, Rahway, N. J. | 4-13 |
| 5-4* | Cast-iron pipe conduit, N. Y. | 4-20 |
| 5-8 | Water-works, Chappell, Neb. | 4-20 |
| 5-8 | Water-works equip., Sherman, Tex | 4-13 |
| 5-9 | Water tower, Lakewood, Ohio | 4-20 |
| 5-12 | Water mains, Rockport, Ohio | 4-20 |
| 5-15* | Water-works, Penticton, B. C. | 4-6 |
| 5-16* | Tunnel, New York | 4-20 |
| 5-31 | Pipe, Vancouver, B. C. | 4-6 |
| 6-1* | Canal enlargement, Boise, Idaho | 3-30 |

## Sewers.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-20 | Sewers, Canton, Ohio | 4-20 |
| 4-20 | Sewers, Springfield, Ohio | 4-20 |
| 4-21 | Sewers, Dayton, Ohio | 4-20 |
| 4-21 | Sewer, Kenosha, Wis. | 4-20 |
| 4-21 | Sewers, Putnam, Conn. | 4-20 |
| 4-21 | Sewers, Seattle, Wash. | 3-30 |
| 4-21 | Sewers, Allegan, Mich. | 4-6 |
| 4-24 | Sewers, Yonkers, N. Y. | 4-6 |
| 4-24 | Sewer, Berea, Ohio | 4-6 |
| 4-24 | Sewers, New York, N. Y. | 4-13 |
| 4-24 | Sewer, Mankato, Minn. | 4-20 |
| 4-25 | Sewers, Rockhill, S. C. | 4-20 |
| 4-27 | Sewers, Ottawa, Ont. | 4-20 |
| 4-27 | Sewers, New York, N. Y. | 4-20 |
| 4-27 | Sewers, Newark, N. J. | 4-20 |
| 4-28 | Storm sewers, Geneva, Ohio | 4-20 |
| 4-29 | Sewers, Racine, Wis. | 4-20 |
| 5-1* | Sewers, Kokomo, Ind. | 4-20 |
| 5-1 | Sewer, Fremont, Ohio | 4-6 |
| 5-1 | Sewers, Lusk, Wyo. | 4-6 |
| 5-1 | Sanitary sewers, Golden, Colo. | 3-30 |
| 5-1 | Sewers, Xenia, Ohio | 3-30 |
| 5-1 | Sewers and water mains, Cloquet, Minn | 4-13 |
| 5-2 | Sewer, Edmonton, Alta. | 4-13 |
| 5-2* | Sewers, Pensacola, Fla. | 3-30 |
| 5-2 | Sewers, Canton, S. Dak. | 4-20 |
| 5-8 | Sewer, Ft. D. A. Russell, Wyo. | 4-20 |
| 5-8 | Sewers, Elyria, Ohio | 4-20 |
| 5-8 | Sewers, Humbolt, Kan. | 4-13 |
| 5-9* | Laying sewer pipe, Toronto, Ont. | 4-13 |
| 5-15 | Settling tanks, etc., Batavia, N.Y. | 4-13 |
| 5-15 | Sewer, The Dalles, Ore. | 4-13 |
| 7-3 | Sewage disposal system, San Jose, Cal. | 2-23 |

## Streets and Roads.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-20 | Sidewalks, etc., Roanoke, Va. | 4-20 |
| 4-21 | Paving, etc., Cincinnati, Ohio | 4-20 |
| 4-21 | Paving, etc., Knoxville, Tenn. | 4-20 |
| 4-21 | Paving, Kenosha, Wis. | 4-20 |
| 4-21 | Paving, Salt Lake City, Utah | 4-13 |
| 4-21 | Paving, Morenci, Mich. | 4-13 |
| 4-21 | Road, Bowling Green, Ohio | 4-6 |
| 4-22* | Pavement repair, Wash., D. C. | 4-6 |
| 4-22* | Grading, Bessemer, Mich. | 4-13 |
| 4-24 | Paving, etc., Ashland, Ohio | 4-6 |
| 4-24 | Road construction, Marion, Ohio | 4-6 |
| 4-24 | Macadam roads, Morristown, N. J. | 4-6 |
| 4-24* | Highway imp'ts, Albany, N. Y. | 3-30 |
| 4-24 | Paving, etc., New York, N. Y. | 4-13 |
| 4-24 | Paving, Youngstown, Ohio | 4-20 |
| 4-24 | Paving, Galveston, Tex. | 4-20 |
| 4-24 | Paving, etc., Pittsburg, Pa. | 4-20 |
| 4-24 | Street impvt., Jersey City, N. J. | 4-20 |
| 4-24 | Paving, Maysville, Ky. | 4-20 |
| 4-25 | Paving, Cincinnati, Ohio | 4-20 |
| 4-25 | Sidewalks, etc., Boston, Mass. | 4-20 |
| 4-25 | Paving, etc., Troy, N. Y. | 4-20 |
| 4-25* | Paving, Plattsburg, N. Y. | 4-13 |
| 4-25 | Paving, Danville, Ill. | 4-13 |
| 4-25* | Paving, Dunkirk, N. Y. | 4-13 |
| 4-26* | Highway imp'ts, Albany, N. Y. | 3-30 |
| 4-26 | Paving, Boston, Mass. | 4-20 |
| 4-26 | Paving, etc., New York | 4-20 |
| 4-27 | Grading, etc., Dayton, Ohio | 4-20 |
| 4-27 | Paving, Washington, Pa. | 4-20 |
| 4-27 | Paving, Newark, N. J. | 4-20 |
| 4-27 | Paving, etc., New York | 4-20 |
| 4-27* | Sidewalks, etc., Poughkeepsie, N. Y. | 4-20 |
| 4-28 | Paving, Victoria, B. C. | 4-20 |
| 4-28* | Highway Imp'ts, Albany, N. Y. | 3-30 |
| 4-28 | Road impvt., Cincinnati, Ohio | 4-6 |
| 4-28* | Paving, Jacksonville, Fla. | 4-6 |
| 4-28 | St. impvt., Geneva, Ohio | 4-13 |
| 4-29 | Road impvt., Marysville, Ohio | 4-6 |
| 4-29 | Paving, etc., Boston, Mass. | 3-30 |
| 4-29 | Gravel roads, Terre Haute, Ind. | 4-20 |
| 5-1 | Gravel road, Williamsport, Ind. | 4-20 |
| 5-1 | Macadam road, Greencastle, Ind. | 4-20 |
| 5-1 | Paving, San Luis Obispo, Cal. | 4-20 |
| 5-1 | Paving, Ravenna, Ohio | 4-20 |
| 5-1* | Sidewalks, Grenada, Miss. | 4-20 |
| 5-1 | Macadam road, Versailles, Ind. | 4-13 |
| 5-1* | Highways, Albany, N. Y. | 4-13 |
| 5-2* | Paving and curbing, Hudson, N.Y. | 4-13 |
| 5-2 | Roads, Wabash, Ind. | 4-13 |
| 5-2 | Roads, Bedford, Ind. | 4-13 |
| 5-2* | Paving, New London, Conn. | 4-13 |
| 5-2 | Gravel roads, Logansport, Ind. | 4-20 |
| 5-2 | Macadam road, Bloomfield, Ind. | 4-20 |
| 5-2 | Macadam road, Ft. H. G. Wright, N. Y. | 4-20 |
| 5-2* | Paving, Charlevoix, Mich. | 4-20 |
| 5-2 | Curb and gutter, Columbus, Ohio | 4-20 |
| 5-3 | Grading, etc., Cleveland, Ohio | 4-20 |
| 5-3 | Gravel road, Rockville, Ind. | 4-20 |
| 5-3* | Paving, Jacksonville, Fla. | 4-20 |
| 5-3* | Resurfacing, Jacksonville, Fla. | 4-13 |
| 5-4 | Paving, Fort William, Ont. | 4-13 |
| 5-4* | Paving, Seneca Falls, N. Y. | 4-6 |
| 5-4 | Paving, Fulton, Mo. | 4-20 |
| 5-4 | Paving, etc., New Rochelle, N.Y. | 4-20 |
| 5-5 | Gravel road, Brazil, Ind. | 4-20 |
| 5-5 | Gravel roads, Crown Point, Ind. | 4-20 |
| 5-5 | Street improvement, Cincinnati, Ohio | 4-13 |
| 5-6 | Asphalt, Washington, D. C. | 4-20 |
| 5-8 | Paving, Elyria, Ohio | 4-20 |
| 5-8 | Paving, Barnesville, Ohio | 4-20 |
| 5-9 | Gravel roads, Brookville, Ind. | 4-20 |
| 5-9 | Stone road improvement, Bowling Green, Ohio | 4-20 |
| 5-10 | Road impvt., Marysville, Ohio | 4-20 |
| 5-13 | Gravel road, Rushville, Ind. | 4-20 |
| 5-15 | Paving, etc., Catlettsburg, Ky. | 4-20 |
| 5-15 | Paving, Lackawanna, N. Y. | 4-20 |
| 5-16 | Paving, Memphis, Tenn | 4-13 |

## Miscellaneous.

| Bids close. | | Noted in issue of |
|---|---|---|
| 4-20 | Comfort station, New York | 4-13 |
| 4-20 | Repairs to steamer, New York | 4-13 |
| 4-20* | Superstructure of breakwater, Boston, Mass. | 3-23 |
| 4-20* | Dredging, Duluth, Minn. | 3-23 |
| 4-20 | Hospital, etc., (plans and designs Argentine Republic (Foreign) | 1-12 |
| 4-20* | Dam work, Cincinnati, Ohio | 3-23 |
| 4-20 | Fire apparatus, Vancouver, B. C. | 4-6 |
| 4-20 | Playground, apparatus, New York | 4-13 |
| 4-21 | Fire engines, South Africa (Foreign) | 4-6 |
| 4-21 | Iron fence, Washington, D. C. | 4-6 |
| 4-21 | Canal work, Cornwall, Ont. | 4-13 |
| 4-21 | Garbage disposal, etc., Wellesley, Mass. (garbage) | 4-20 |
| 4-21 | Wire and cable, Wash., D. C. | 4-20 |
| 4-21 | Rock crushers, etc., Los Angeles, Cal. | 4-20 |
| 4-22 | Telephone construction, Regina, Sask | 4-6 |
| 4-22 | Engineering supplies, Panama (U. S. Poss.) | 4-13 |
| 4-22 | Dry kiln, Norfolk, Va. | 3-23 |
| 4-24 | Levee embankment, Cotton Plant, Ark. | 3-30 |
| 4-24 | Jetty, Baltimore, Md. | 3-30 |
| 4-24* | Dredging mchy., Oswego, N. Y. | 3-30 |
| 4-24* | Dredging, Detroit, Mich. | 3-30 |
| 4-24 | Refuse disposal, Boston, Mass. (garbage) | 4-6 |
| 4-24 | Grandstand, Cleveland, Ohio | 4-13 |
| 4-24 | Stairways, New York | 4-13 |
| 4-24 | Steel bars, Los Angeles, Cal. | 4-20 |
| 4-24 | Cedar poles, Moose Jaw, Sask. | 4-20 |
| 4-24 | Lumber, Jersey City, N. J. | 4-20 |
| 4-24 | Dredging, Toronto, Ont. | 4-24 |
| 4-25 | Steam engines, etc., Wash., D. C. | 4-20 |
| 4-25 | Landing piers, Boston, Mass. | 4-20 |
| 4-25 | Repairs, to dolphins, Southport, N. C. | 4-20 |
| 4-25 | Crushed stone, Cincinnati, O. | 4-20 |
| 4-25 | Coal handling plants, Ottawa, Ont. | 4-20 |
| 4-25 | Dredging, Ottawa, Ont. | 4-13 |
| 4-25 | Balcoutes, New York | 4-13 |
| 4-25* | Special castings, Wash., D. C. | 4-6 |
| 4-25 | Ferryboat, Boston, Mass. | 4-6 |
| 4-26 | Freight lift, etc., Elizabeth, N. J. | 4-6 |
| 4-26 | Towboat hire, Cincinnati, Ohio | 4-6 |
| 4-26 | Ditch, Fort Dodge, Iowa | 3-23 |
| 4-26 | Dredging and filling, New York | 4-20 |
| 4-27 | Concrete wagon sheds, etc., Cincinnati, Ohio | 4-20 |
| 4-27 | Hope, New York | 4-20 |
| 4-27 | Fire protection system, N. Y. | 4-20 |
| 4-27 | Improving playground, N. Y. | 4-20 |
| 4-27 | Playground, New York | 4-20 |
| 4-28 | Repairs to scows, N. Y. | 4-20 |
| 4-28 | Wharf extension, Ottawa, Ont. | 4-13 |
| 4-27 | Dredging, Fort Moultrie, S. C. | 4-13 |
| 4-27 | Equipment, Panama (U. S. Poss.) | 4-13 |
| 4-27 | Pier work, Grand Rapids, Mich. | 4-6 |
| 4-28* | Removal of wreck, Boston, Mass. | 3-30 |
| 4-28 | Buildings, shed, etc., Seattle, Wash | 4-13 |
| 4-28 | Asphalt plant, St. Louis, Mo. | 4-13 |
| 4-29 | Air compressor, Hawaii (U. S. Poss.) | 4-13 |
| 4-29 | Dredging, Boston, Mass. | 4-6 |
| 4-30 | Corrugated steel roofs, Egypt (Foreign) | 4-6 |
| 5-1 | Iron, etc., Benicia, Cal. | 4-6 |
| 5-1 | Steel barges, Kansas City, Mo. | 4-13 |
| 5-1 | Plans for skating rink, Sudbury, Ont. | 4-20 |
| 5-1 | Drain, Cornwall, Ont. | 4-20 |
| 5-1 | Gasoline launches, Ottawa, Ont. | 4-20 |
| 5-1 | Street sweeping machines (garbage), New York, N. Y. | 4-20 |
| 5-1 | Fire protection work, New York | 4-20 |
| 5-2 | Ditch, Youngstown, Ohio | 4-20 |
| 5-3 | Jetties, Fort Hancock, N. J. | 4-20 |
| 5-3 | Extension to wharf, White Cove, N. S. | 4-20 |
| 5-3* | Dredging, Fort Totten, N. Y. | 4-6 |
| 5-4* | Drainage canals, Swamquarter, N. C. | 4-13 |
| 5-4 | Dredging, New York | 3-30 |
| 5-6 | Quarantine sta., Galveston, Tex. | 3-30 |
| 5-6 | Dry kiln, Bremerton, Wash. | 4-6 |
| 5-6 | Repairs to ships, Norfolk, Va. | 4-6 |
| 5-9 | Wharf, Fassett, Que. | 4-20 |
| 5-10* | Screening bldgs., Fort Crockett, Tex. | 4-20 |
| 5-10 | Engineering supplies, Panama (U. S. Poss.) | 4-13 |
| 5-10* | Dredging, Charleston, S. C. | 4-13 |
| 5-10* | Lock and dam, Wheeling, W. Va. | 4-13 |
| 5-11* | Dredging, Wilmington, Del. | 4-13 |
| 5-11* | Lock house, etc., Wheeling, W. Va | 4-13 |
| 5-11 | Telephone system, Ripley, Ont. | 4-20 |
| 5-12 | Launch basin, etc., Fort Hamilton, N. Y. | 4-20 |
| 5-12 | Breakwater repairs, Boston, Mass. | 4-20 |
| 5-12* | Dredging, Jacksonville, Fla. | 4-13 |
| 5-15* | Dredging, Oswego, N. Y. | 4-20 |
| 5-15* | Dredging, Newport, R. I. | 4-20 |
| 5-15* | Dredging, Norfolk, Va. | 4-20 |
| 5-15* | Dredging, Baltimore, Md. | 4-13 |
| 5-17 | Lock and dam, Wheeling, W. Va. | 4-20 |
| 5-18* | Dredging, New York | 4-20 |
| 5-18 | Rope, New York | 4-20 |
| 5-27 | Wharf, trestle, etc., Alaska | 4-13 |
| 5-27* | Miter gate moving machines, Panama (U. S. Poss.) | 4-6 |
| 5-29 | Stone, San Francisco, Cal. | 4-20 |
| 5-30 | Franchise, Turlock, Cal., (Elec. Ry.) | 4-20 |
| 5-30 | Railway construction, Scottsburg, Ind. (Elec. Rys.) | 4-20 |
| 6-1 | Canal, Wilmot, Ark. | 4-13 |
| 6-3 | Floating cranes, Washington, D.C. | 4-6 |
| 7-22 | Port work, Chile (Foreign) | 4-6 |
| 8-1 | Designs, etc., for monument, Cincinnati, Ohio | 2-9 |

## Examinations.

| Examination date. | | Noted in issue of |
|---|---|---|
| 4-22 | Assistant Director, Wash., D. C. | 3-23 |
| 4-29 | Asst. Topographer, Ottawa, Ont. | 4-20 |
| 4-29 | Triangulator and Compositor, Ottawa, Ont. | 4-20 |
| 5-3 | Junior chemist, Wash., D. C. | 3-23 |
| 5-10 | Scientific Assistant in Wood Utilization, Washington, D. C. | 4-6 |
| 5-10 | Telegraph Operator, Washington, D. C. | 4-20 |
| 5-24 | Highway engineer, Washington, D. C. | 4-20 |
| 5-24 | Topographic Draftsman and Copyist, Topographical Draftsman, Washington, D. C. | 4-20 |
| 5-24 | Prepator, Washington, D. C. | 4-20 |
| 5-24 | Drainage Engineer, Wash., D. C. | 4-20 |
| 5-25 | Forest Pathologist, Wash., D. C. | 4-20 |
| 5-24 | Assistant Chemical Engineer in Forest Products, Wash., D. C. | 4-20 |

struction of sluice gates for the St. Mary's Falls Canal, was that of the Milwaukee Bridge Co., of Milwaukee, Wis., at $25,865.

✚CAR FERRY.—Detroit, Mich.—The Mackinac Transportation Co., of Detroit, has awarded a contract to the TOLEDO SHIPBUILDING CO. for a new steel car ferry to cost about $500,000.

✚VAULT WORK.—Jackson, Mich.—The contract for making betterments in connection with the construction and for installing a new vault in the U. S. public building, Jackson, Mich., has been awarded to W. J. McALPINE, of Dixon, Ill., at $10,101.

PARK WORK.—Chicago, Ill.—On April 4 the citizens voted to issue $875,000 of bonds for the extension of Lincoln Park. B. J. Mullaney is Comr. Pub. Wks.

✚DITCHES.—Prophetstown, Ill.—Ten bids were received on April 12 by the Commissioners of the Union Special Drainage District of Tampico, Prophetstown and Hume, for constructing ditches requiring the removal of about 85,000 cu. yds. The contract has been awarded to M. J. OMEARA, of Cullom, Ill., at 10.49 cts. per cu. yd.

LEVEE.—East St. Louis, Ill.—The Board of Trustees of the East Side Levee and Sanitary District on April 8 instructed its engineers to prepare plans for Section 2 of the front levee. R. W. Sikking is Clk.

✚SIGNAL SYSTEM.—Sparta, Wis.—The War Department has awarded the contract for installing a signal system on the goverment rifle range and reservation here to the ELECTRIC SUPPLY & CONSTRUCTION CO., of LaCrosse, Wis., at about $10,000.

✚DITCH.—Mankato, Minn.—The contract has been awarded to C. S. ERICKSON by Edgar Weaver, County Audr., for constructing ditch No. 25. The work requires 65,500 cu. yds. of earth excavation and 3,700 ft. of 10-in. tile.

✚DITCH.—Mankato, Minn.—The contract for judicial ditch No. 14 in Marshall and Pennington Counties has been awarded to the VALLEY DREDGING CO., of Stephen, Minn., the lowest bidder, at 10½ cts. per yd. for excavating and $125 per mile for roadmaking. The second lowest bid was made by F. O. Dahl, of St. Cloud, at 10½ cts. per yd. for excavating and $150 per mile for roadmaking. Bids were opened on April 8.

✚WHARF.—Kansas City, Mo.—Bids for the construction of the municipal wharf, 560 × 50 ft., along the river front between Delaware and Walnut Sts., were opened by the Board of Public Works on April 10. The contract was awarded to the A. M. BLODGETT CONSTRUCTION CO., Commerce Bldg., Kansas City, Md., the lowest bidder, at $22,760. There were eleven bids submitted.

*DREDGING.—Galveston, Tex.—Bids were received as follows on March 31 by Maj. G. P. Howell, Corps Engrs., U. S. A., Galveston, for dredging Galveston Channel, Tex.: L. T. Gaylord, Houston, Tex., 67 cts. per cu. yd.; total, $281,400; Bowers Southern Dredging Co., Galveston, 7.4 cts.; $310,800; R. A. Perry, San Francisco, Cal., 8.24 cts.; $346,080; Southern Dredging Co., Mobile, Ala., 9 cts.; $378,000; Home Dredging Co., Mobile, Ala., 9.84 cts., $413,280.

*SCREENING BUILDINGS.—Fort Crockett (Galveston post-office), Tex.—Bids will be received until 3.30 p. m., May 10, by Capt. P. Whitworth, Constr. Q. M., U. S. A., for screening 18 buildings.

STEEL RAILS.—Boise, Idaho.—See item under Water Supply—Irrigation.

ROCK CRUSHERS, ETC.—Los Angeles, Cal.—Bids will be received until 2 p. m., April 21, by the Board of Public Works for rock crushers and concrete mixers.

DREDGING.—Los Angeles, Cal.—Plans for additional dredging in Los Angeles Harbor under the $270,000 appropriation made in the last River and Harbor Act have been approved by the War Department. Bids will be asked soon, which will call for deepening harbor and dredging contour line in outer harbor. The channel will be made full 500 ft.

STEEL BARS.—Los Angeles, Cal.—The Board of Public Works will receive bids until 11 a. m., April 24, for furnishing to city corrugated steel bars. Horace B. Ferris is Secy.

WHARF.—Oakland, Cal.—Plans and specifications were ordered drawn for a wharf in the Key Route Basin, including a temporary approach to the shore for use during the work now in progress by the Board of Public Works on April 5. F. C. Turner is City Engr.

✚TROLLEY POLES.—San Francisco, Cal.—Bids were received on April 5 by the Board of Public Works for furnishing and delivering steel trolley poles for the Geary St. municipal railway. It is reported that the contract has been awarded to the NATIONAL TUBE CO. at $28.16 each for poles 28 ft. long, and $29.90 each for poles 30 ft. long.

*STONE.—San Francisco, Cal.—Bids will be received until noon, May 29, by Col. John Biddle, Corps Engrs., U. S. A., 401 Custom House, San Francisco, for furnishing and delivering stone for Humboldt Harbor jetties.

EXTENSION TO WHARF.—White's Cove, N. S.—Bids will be received until 4 p. m., May 3, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for the construction of an extension to wharf at White's Cove, Digby County.

WHARF.—Fassett, Que.—Bids will be received until May 9 by R. C. Desrochers, Secy. Pub. Wks., Dept. Ottawa, Ont., for the construction of a wharf at Fassett, Labelle County, Que. Plans can be seen at office of J. L. Michaud, Dist. Engr., Merchants' Bank Bldg., Montreal, Que.

DRAIN.—Cornwall, Ont.—Bids will be received until May 1 for the construction of Stoney Creek drain and its branch in the Township of Cornwall. Bids may be submitted for the whole work or the main drain and the branch drain separately. Plans and specifications may be examined at the offices of Magwood & Walker, Cornwall, and John Mullin, Township Clk., Cornwall.

TELEPHONE SYSTEM.—Ripley, Ont.—Bids will be received until May 11 by Angus Martyn, Secy.-Treas., Ripley, for the construction of a telephone system in the Township of Huron, Ont.

SKATING RINK.—Sudbury, Ont.—The Sudbury Rink Co. desires plans by May 1 for a skating rink, fireproof, steel and concrete or brick, 70 × 170 ft., to cost not more than $16,000. Accepted plan only will be paid for and architect engaged.

COAL HANDLING PLANTS.—Ottawa, Ont.—The time for receiving bids for coal-handling plants for the National Transcontinental Ry. Co. at Springfield, Redditt and Graham, has been extended until April 25. Gordon Grant is Ch. Engr., Ottawa.

✚PLAZA.—Ottawa, Ont.—The contract for the construction of the Plaza Laurier here has been awarded by the Government to McGILLIVRAY & O'TOOLE, of Ottawa, at about $235,000. The work embraces filling in the space between Sappers and Dufferin bridges, over the canal, and the partial rebuilding of the bridges. It will make a public square faced on three sides by the new Grand Trunk station, the post-office and the Chateau Laurier.

GASOLINE LAUNCHES.—Ottawa, Ont.—Bids will be received until noon, May 1, by A. Johnston, Deputy Minister of Marine and Fisheries, Dept. of Marine and Fisheries, Ottawa, for the construction of two twin-screw, gasoline launches with dimensions as follows: Length, 56 ft.; breadth, 10 ft.; draft, 3 ft.; speed, 10½ knots per hour. Each boat must be equipped with two 34-HP. gasoline engines of satisfactory type.

DREDGING.—Toronto, Ont.—Bids will be received until 4 p. m., April 24, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for dredging at Toronto.

CEDAR POLES.—Moose Jaw, Sask.—Bids will be received until April 24 by the city for the supply of approximately 400 white cedar poles for use in the Electric Light Department. Specifications may be obtained from J. D. Peters, Elec. Supt., or W. F. Heal, City Clk.

## EXAMINATIONS.

TRIANGULATOR AND COMPUTER.—A Triangulator and Computer for the Geological Survey Branch of the Department of Mines, Subdivision A of the Second Division, initial salary $1,600 a year. Candidates must have had practical experience in field and office. They must possess a knowledge of methods of executing, computing, and adjusting different grades of triangulation and contour traverses, determination of azimuths and time, computation of geodetic co-ordinates; they must also have a knowledge of leveling and of the methods used in topographic mapping. Forms upon which to make formal application will be received by the Secy. of the Civil Service Comn. until April 29. William Foran is Secy. of Comrs., Ottawa, Ont.

ASSISTANT CHEMICAL ENGINEER IN FOREST PRODUCTS.—Washington, D. C.—The U. S. Civil Service Commission announces an examination on May 24 to secure eligibles from which to make certification to fill a vacancy in the position of Assistant Chemical Engineer in Forest Products, at a salary of from $1,200 to $1,500 a year, in the Forest Service, for duty at Madison, Wis., and vacancies requiring similar qualifications as they may occur, unless it shall be decided in the interest of the service to fill the vacancy by reinstatement, transfer, or promotion. The examination will consist of the subjects mentioned below, weighted as indicated: Chemical arithmetic, 25 points; Engineering, 25 points; Chemistry of forest products, 25 points; Training and experience, 25 points. Applicants must have reached their 20th but not their 50th birthday. Examination form 1312.

ASSISTANT TOPOGRAPHER.—Ottawa, Ont.—The Commissioners of the Civil Service of Canada hereby give public notice that applications will be received from candidates qualified to fill the following positions in the Inside Division of the Civil Service of Canada: Three Assistant Topographers for the Geological Survey Branch of the Department of Mines, Subdivision A of the Second Division, initial salary, $1,600 a year. Candidates must have had practical experience in topographical (contoured) map making, both in office and field, and must possess a knowledge of the following:—photo-topography, field and office methods; topography by plane table methods; detailed topographical mapping methods; surveying instruments, their adjustment and use; methods used for control of topographical maps. Candidates must be good draftsmen. Forms upon which to make formal application will be received by the Secretary of the Civil Service Comn. until April 29. William Foran is Secy. of Comn., Ottawa, Ont.

**For other Proposal Advertisements see pages 49, 50, 52, 53, 56 of Advertisements and Construction News page 194.**

## CATSKILL AQUEDUCT.

CONTRACT 65.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 65, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 15 feet and 14 feet inside diameter. From the northerly end of the work at Aqueduct and Burnside avenues near University Heights, the tunnel line extends in a general southerly direction under Aqueduct and Lind avenues, in the Borough of The Bronx, to the crossing under the Harlem river at 167th street, near Highbridge, thence beneath Highbridge, St. Nicholas and Morningside parks and connecting streets, in the Borough of Manhattan, to Central park near Eighth avenue and West 99th street. The work will be carried on through 7 shafts, spaced from 2,500 to 5,100 feet apart, and varying in depth from 260 to 475 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.

JOSEPH P. MORRISSEY,
Secretary.

## CATSKILL AQUEDUCT.

CONTRACT 66.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 66, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, varying from 14 feet to 12 feet inside diameter. From the northerly end of the work in Central park, near Eighth avenue and West 99th street, the tunnel line extends in a general southerly direction under Central park, Sixth avenue and Broadway to 14th street, in Union Square. The work will be carried on through 6 shafts, spaced from 2,300 to 4,550 feet apart, and varying in depth from 200 to 250 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.

JOSEPH P. MORRISSEY,
Secretary.

## INCINERATOR PLANT.

Erie, Pa., April 17th, 1911.

Sealed proposals will be received by the Chairman of the Joint Session of Councils to be held in the Common Council Chamber on Monday, May 8th, 1911, at 8.00 o'clock P. M., for the construction of an incinerator plant for the City of Erie.

Plans of the proposed site and general specifications may be had at the office of the City Engineer.

A certified check, or certificate of deposit, payable to the Treasurer of the City of Erie, in the sum of ten (10) per cent. of the amount of the bid, must accompany each proposal as a guarantee to enter into a contract if awarded.

The Councils reserve the right to reject any or all bids.

B. E. BRIGGS,
City Engineer.

## CATSKILL AQUEDUCT.

CONTRACT 67.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 67, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 12 feet and 11 feet inside diameter. From the northerly end of the work in Union Square, at 14th Street, the tunnel line extends in a general southerly direction through the Borough of Manhattan, under Fourth avenue, the Bowery, Delancey, Allen, Hester and Clinton streets, thence beneath the East river to the foot of Bridge street, in the Borough of Brooklyn, and through this Borough under Bridge street and Flatbush avenue to the terminal shaft, Shaft 23, at Third avenue and Schermerhorn street, and from Flatbush avenue under Lafayette street to the terminal shaft, Shaft 24, in Fort Greene park. The work will be carried on through 6 shafts, spaced from 3,800 to 5,200 feet apart, and varying in depth from 310 to 740 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above [illegible] by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.

JOSEPH P. MORRISSEY,
Secretary.

## CATSKILL AQUEDUCT.

CONTRACT 63.

New York, N. Y.

Sealed bids will be received by the Board of Water Supply, at its offices, seventh floor, 165 Broadway, New York, until 11 A. M. on Tuesday, May 16, 1911, for Contract 63, for the construction of a portion of the City tunnel of the Catskill aqueduct, a circular tunnel in rock, 15 feet inside diameter, and about 21,200 feet long. From the northerly end of the work in Yonkers, about 200 feet north of the New York City line, between Jerome and Mt. Vernon avenues, the tunnel line extends in a general southerly direction through the Borough of The Bronx, under Van Cortlandt Park and Jerome Park reservoir, and thence beneath the Old Croton aqueduct and Aqueduct avenue to Burnside avenue, near University Heights. Tunnel construction will be carried on through five shafts, spaced from 3,500 to 5,000 feet apart, and varying in depth from 215 to 240 feet.

At the above place and time the bids will be publicly opened and read. Pamphlets containing information for bidders, and pamphlets of contract drawings can be obtained at the above address by depositing the sum of ten dollars ($10) for each pamphlet. For further particulars see Information for Bidders.

CHARLES STRAUSS, President;
CHARLES N. CHADWICK,
JOHN F. GALVIN,
Commissioners of the Board of Water Supply.

JOSEPH P. MORRISSEY,
Secretary.

## STEAM SHOVEL WORK.

Slatington, Pa.

TO LET.—75,000 cu. yds. of steam shovel work in Pennsylvania, suitable for small shovel outfit. Address MACARTHUR BROTHERS COMPANY, 11 Pine Street, New York City, or Slatington, Pa.

## GRANOLITHIC SIDEWALKS.

Grenada, Miss.

The City of Grenada will receive bids until May 1st, 1911, for the construction of 75 to 150,000 ft. of granolithic sidewalks, according to plans on file at the office of the City Recorder.

L. B. JAMES,
City Recorder.

## POWER PUMPS, ETC.

Sioux City, Iowa.

Bids will be received by the City Clerk of Sioux City, Iowa, until 10 A. M., April 29th, 1911, for furnishing and installing two triplex single or double acting power pumps and two gasoline engines. Specifications may be had at the office of G. B. HEALY, Supt. of Parks and Public Property.


## Situations Open
(Or Vacant)

WANTED.—Chief draftsman for structural steel plant in New York district. Give full details as to experience, references and salary wanted. Address D. B. 16, Engineering News, New York. 16-1t

SHOP superintendent for general structural work in vicinity of New York City. Address "E. B. 16," Engineering News, New York. 16-1t

## Experienced Sewer Pipe Salesman Wanted

for New York and vicinity. Apply by letter stating experience, salary and reference.
THE ROBINSON CLAY PRODUCT CO., of N. Y.
Flatiron Bldg., New York City. 16-1t

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